2026

COMPANY PROFILE

ILLYRIAN CONSULTING ENGINEERS

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"Sami Frashri" Street, Bjorn Building, 11-th Floor, Postal Code 1019 Tirana Albania
Tel/Fax: +355 -4 -226 05 72/email: info@ice.al
web: www.ice.al

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ABOUT US

We are a multi-discipline engineering, architectural, planning, and design consultancy delivering excellent client service and smart/creative solutions, with the headquarters in Tirana and branches in Pristine, Kosovo and Skopje, Republic of North Macedonia.

We work closely with our clients to shape tailored solutions, while engaging our international network of partners and collaborators. This enables us to combine creative and technical expertise with genuine global reach, ultimately supporting the realization of our clients' visions and ambitions.

Founded in 2006, ICE is led by managerial experts who have honed their engineering skills since 1990, standing on the shoulders of the most prominent national experts and thus inheriting a treasure of a **half-century** of expertise and offers a wide range of remarkably professional disciplines to the public and private institutions and clients.

San Pietro Resort
Photo credits: ©ICE

OUR VALUES

Here at **ICE**, we strive for excellence in all of our endeavors and conduct business with fairness and integrity. At the same time, we are committed to the employees' well-being and self-development while responsibly embracing our role in the community with accountability to ourselves the future generations. Driven by our moral and intellectual integrity, we hold true to our ethical standards which reside at the core of our professionalism. We never neglect the worth of our reputation for we are what we do.

- Accountability
- Integrity
- Safety & Health
- Quality
- Innovation
- Sustainability
- Reputation
- Culture

OUR WAY

With a genuine commitment and discipline, we rely on the forward-thinking of our collaborative team of more than 100 top-level professionals and global network of experts to push the boundaries and deliver state-of-the-art solutions by enhancing quality and sustainability.

Tervoli HPP
Photo credits: ©ICE

PROFILE

ICE is structured around **4 core departments**: Transportation, Energy, Water Resources and Environmental Engineering, and Building Science, all working collaboratively hand in hand and contributing to the **8 sectors** we serve: Transportation, Water Resources, Environment, Building Science, Hydropower, Oil & Gas, Geotechnics & Underground Structures, and Photovoltaics. **ICE** has distinguished itself as a solid partner of Albania's recent transformations and has developed new ideas and fresh concepts for the Albanian market. Since its establishment **ICE** has designed highways, motorways, rural roads, HPP-s, outstanding penstocks with water **pressure up to 1000m**, supervised more than **1500 km of road construction**, supervised the largest motorway project in Albania, has been involved in the design review of 212 km pipeline and compressor stations for the TAP project, designed and supervised various objects of different typologies such as residential building, schools, hospitals, resorts, industrial facilities, institutional buildings and has contributed in significant landmarks near the Capital of Tirana City such as the Central **Great Mosque** of Namazgah, the New Tower of Tirana International Hotel, revitalization of **Pyramid**, all located in 2 square kilometers around the center of Tirana.

SECTORAL REFERENCES

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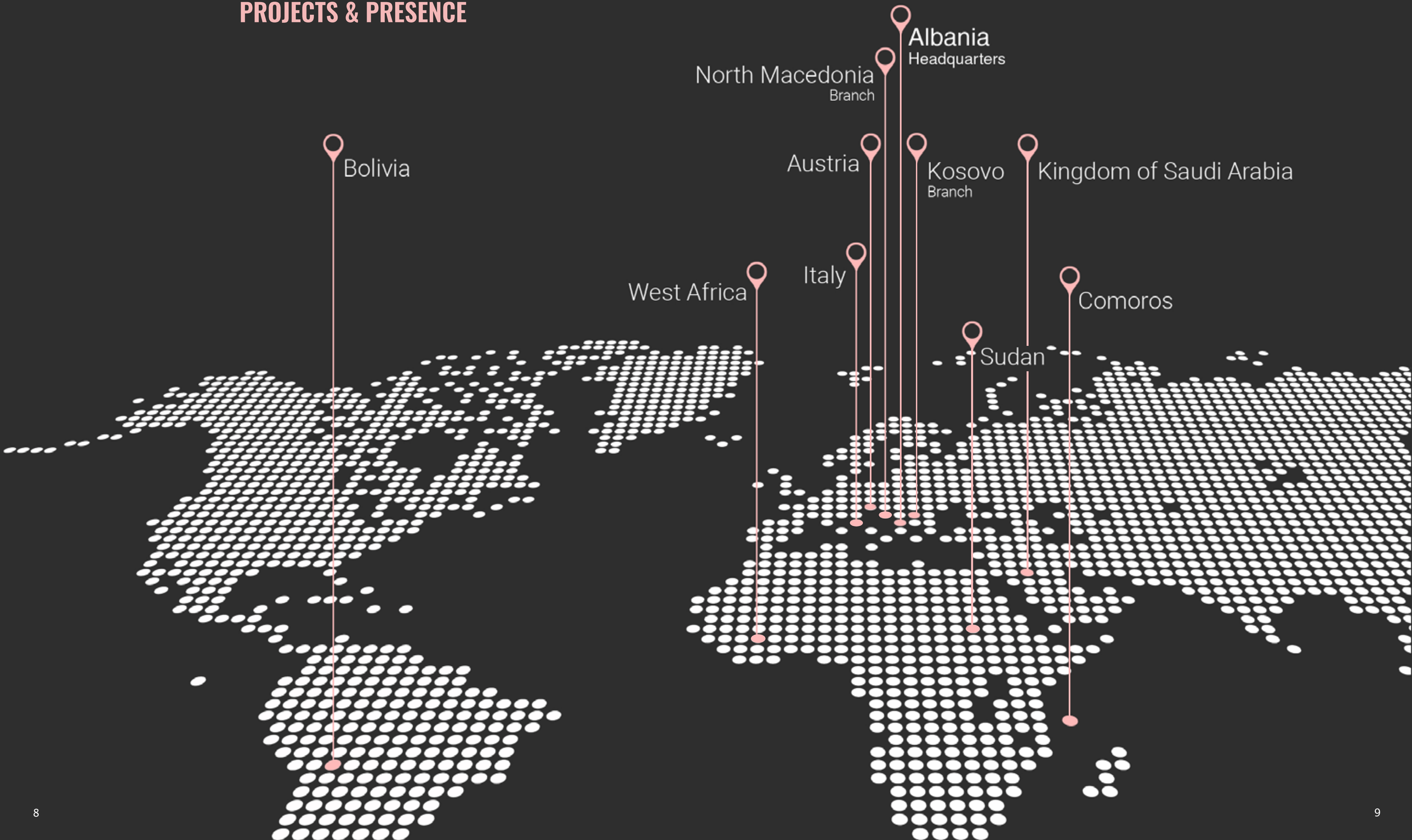
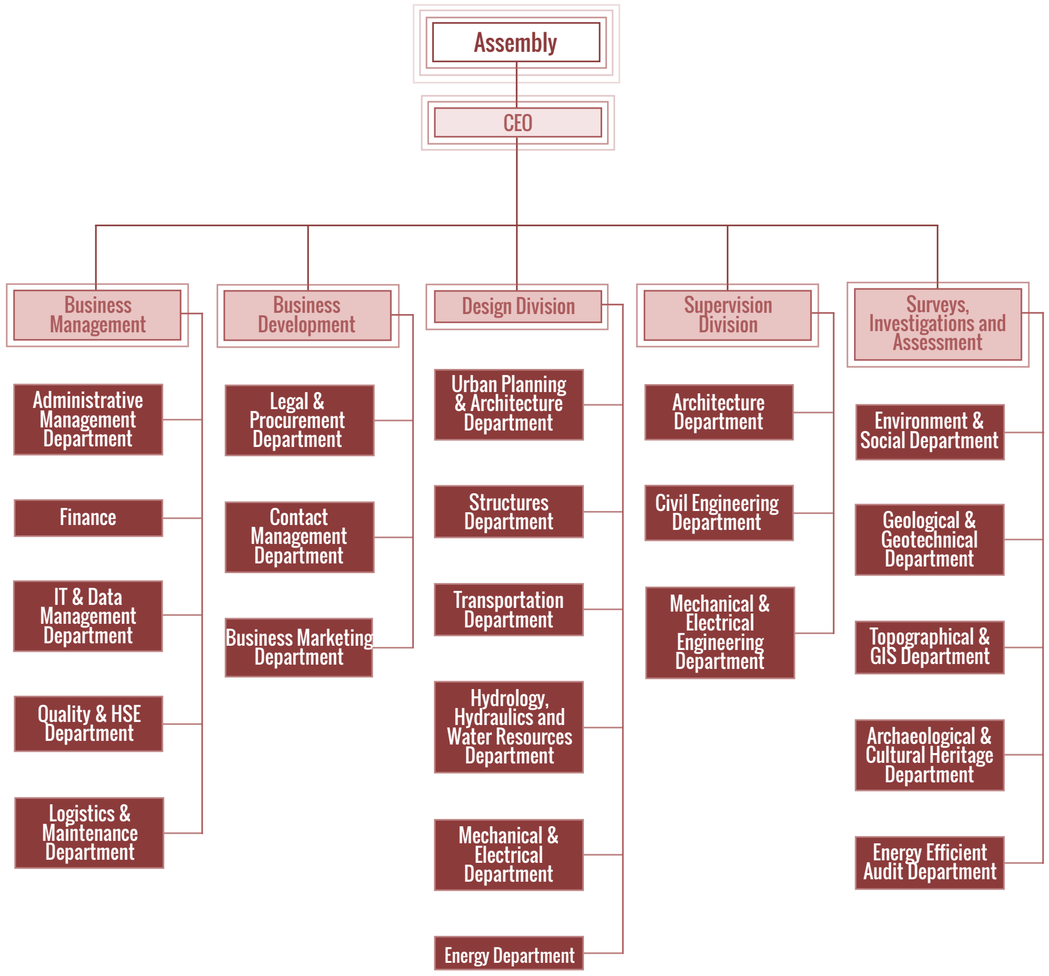
PROJECTS & PRESENCE



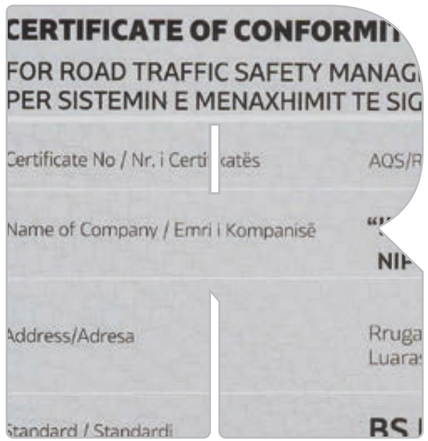
COMPANY'S ORGANIZATION CHART

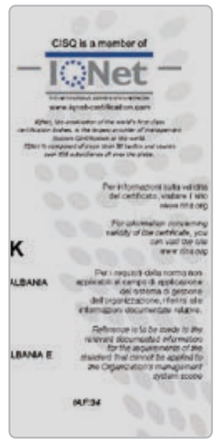


ICE+ Software & Digitalization

These days, with everything going digital, the infrastructure industry/sector faces several daily and urgent challenges. As a part of ICE's initiative of digital innovations, ICE+ is our team developing several tools, systems, and processes like software and spreadsheets for analysis, calculation, and design purposes in different applications for indoor utilization, aiming to provide impactful and effective solutions to such challenges/issues. Some of the developed products can be listed as below:

Application	Description
R/C elements	Determination of nominal concrete cover; Determination of minimum strength class concrete (according to EN 1992-1-1:2004 - Section 4, EN 206-1:2000).
R/C elements	Detailing of longitudinal re-bars of the reinforced concrete works (according to Eurocodes 1992-1-1:2004 - Section 8).
R/C elements	Calculation of reinforced concrete section for bending, shear, torsion, punching shear, deflection, crack width, shrinkage, creep. Calculation of corbels. Calculation of SFRC sections (according to RILEM TC-162-TDF (2003) and FIB Model Code 2010).
Pre-stressed / Post-tensioned elements	Calculation of post-tensioned girder according to AASHTO LRFD 2007 Specifications (SI). Calculation of pre and post-tensioned girder according to EN 1992-11:2004.
Bridge Girders	Calculation of deflection and crack widths of bridge girder according to KTP (Russian application CH-62). Transversal distribution of loads in bridge according to Guyon-Massonnet method.
Powerhouse, anchor blocks	Powerhouse Stability Analysis. Saddle stability analysis.
Steel elements	Anchor rings calculation according to "Steel penstock - ASCE 79 - 2012". Calculation of bolts bearing capacity (according to EN 1993-1-1:2005).
Hydraulic	Spreadsheets for Small Hydro Power Plant (water intake, stilling basin, forebay, surge tank, penstock, hydraulics gates, water hammer, weir, channels, settling basin, energy).
Hydraulic	Software in VBA 2008 for Small Hydro Power Plant, energy calculations.





Certifications

ISO 9001-2015
BS ISO 39001-2012
EN-ISO 14001-2015
ISO 9001-2015
ISO 45001-2018
ISO 50001-2018
PAS 99-2012
SA 8000-2014

Memberships

ICE is an active member of the Albanian Association of Consulting Engineers (AACE).

ICE is member of the Foreign Investors Association of Albania (FIAA).

ICE is member of the Federation of Consultants from Islamic Countries (F.C.I.C.).

Highlighted Projects In Transportation Sector

Year	Client	Project Name
Ongoing	Municipality of Tirana	Consulting Services for the Implementation of the "Green Transport Tirana" Project, ***Tirana, Albania***
2025	Ministry of Infrastructure, Kosovo	Supervision of Construction Works for Regional Roads, ***Kosovo***
2024	WBIF	Preliminary Project for the Rehabilitation of Corridor VIII Section Rrogozhina – Pogradec Railway
2023	Gener 2	Preparation of the Project Implementation of the structures of 6 overpasses on the Thumanë - Vorë - Kashar highway
2022	Albanian Development Fund	Preparation of Technical Design for "Improvement of the Tamarë - Vukël Road Segment"
2022	Albanian Development Fund & KFAED	Consulting Services for Feasibility studies for Infrastructural Transport Projects for the Municipalities of Vlorë, Himarë and Sarandë
2021	Albanian Development Fund	Detailed Design for the Reconstruction of "Miqësia" and "Azem Hajdari" streets, Spitallë Area, Durrës Municipality.
2021	Albanian Development Fund	Study and Design of Golem Tourist Area, ***Kavajë, Albania***
2021	WBIF	IPF8: Detailed Design for the Rehabilitation of the Durrës - Rrogozhinë Section of the Railway Line ***Durres – Elbasan - Pogradec, Albania***
2020	WBIF	IPF6: Shkodra Lake Area, Villages of Shiroka and Zogaj, Water supply and Sewage Systems and Improvement of Waste Management: Feasibility Study and ESIA, ***Albania***
2020	Albanian Development Fund	Design Services for public infrastructure in the mandatory areas for development in ***Vorë, Albania***
2020	WBIF	IPF6 Detailed Design for the Rehabilitation of the Railway Line Vorë - Hani Hotit WB16-ALB- TRA-01 D, ***Albania***
2020	Saudi Fund for Development	Design review of reconstruction project of the roads: Mutsamudu-Sima, Sima-Bongoueni and Sima-Bimbini in Anjouan Island, ***Comoros Islands***
2020	Albanian Development Fund	Detailed Design Services for Public Infrastructure in Developing Areas ***Valias, Albania***
2019	Shkoder Municipality	Study and Design of Traffic, Mobility and Traffic Shkodër, Lights of Shkodër Municipality ***Shkodër, Albania***
2019	Ministry of Infrastructure, Kosovo	Detailed Design, Design Review and Construction Supervision of the Upgrading Milloshevë – Mitrovicë M2 Main Road Project ***Mitrovica, Albania***
2018	Elbasan Municipality	Urban requalification of the Volunteer neighborhood ***Elbasan, Albania***
2018	Albanian Development Fund	Design of Reconstruction of the "Myzeqeja Agricultural Ring Road: Roundabout - Imesht - Ngurrëz, Fier i Ri - Kashtbardh,Qerret - Kadiaj - Albania Savër" ***Lushnje, Albania***

Year	Client	Project Name
2017	Tirana Municipality	Design of Extension of New Boulevard and Rehabilitation of Lana River in ***Tirana, Albania***
2017	WBIF	IPF3 Regional Strategy For Sustainable Hydropower In The Western Balkans WBEC- REG-ENE-01 ***Albania***
2017	Trans Adriatic Pipeline AG Albania	Licensed Supervisor Engineering Services for TAP Access Roads and Bridges in ***Albania***
2015	WBIF	IPF4: Gap analysis/needs assessment in the context of implementing El Floods Directive in the Wester Balkans (WB FLOODS) ***Kosovo & Albania***
2013	WB & ADF	Supervision of Rural Roads ***Albania***
2012	Ministry of Public Works and Transport Albania	Technical Assistance to the Ministry of Public Works and Transport ***Tirana, Albania***
2011	Albanian Road Authority	Detailed Design of the Highway: Tirana - Elbasan Road ***Tirana, Albania***
2011	European Commission	Feasibility Study of Tepelena Bypass and Preparation of Detailed Design, Tender Documents and Supervision of Construction for Gjirokastër and Tepelena Bypasses - EUROPEAID/126332/C/SER/AL ***Tepelenë - Gjirokastër, Albania***
2010	Albanian Road Authority	Detailed Design of the Motorway: Tirana New Ring road - Tirana Elbasan Motorway ***Tirana, Albania***
2010	Ministry of Infrastructure, Postal and Telecommunication	Legal-technical & Transaction Advisory Services for Route No.7: Morinë - Merdarë Motorway ***Kosovo***
2010	Albanian Road Authority	Detailed Design for reconstruction, widening, improving and overlaying of the Road "Uraka- Ura e Shoshajve", ***Dibër, Albania***
2009	Albanian Road Authority	Supervision of the Works for the Construction of the Motorway Rrëshen Kalimash ***Kukës, Albania***
2008	EBRD/IDA & ADF - Albania	Technical Evaluation Community Works Project II ***Tirana, Albania***
2008	Albanian Road Authority	Detailed Design for reconstruction, widening and overlaying of the Road "Mjedë - Pukë intersection ***Pukë, Albania***
2008	Albanian Road Authority	Study and Design the Engineering Measurement in the Road Rubik - Rrëshen - Gjegjan ***Kukës, Albania***
2007	Ministry of Public Works and Transport and Telecommunication	Technical Assistance to the Ministry of Public Works and Transport of Albania ***Tirana, Albania***
2007	Albanian Road Authority	Detailed Design of 4 major interchanges in the main highway Durres-Rrogozhine ***Durrës, Albania***
2007	Albanian Road Authority	Continuation and Completion of Kavaja ring road ***Kavajë , Albania***
2007	Albanian Road Authority	Design of traffic signs for 180km of state roads in ***Albania***

Highlighted Projects In Energy Sector

Year	Client	Project Name
2025	GIZ GmbH	Prefeasibility study on smart street lighting and energy efficiency in public buildings in ***Elbasan, Albania***
2024	Fier Thermoelectric	Hydrological and Hydraulic Survey TEC Roskovec, ***Albania***
2023	Interphoton Investment Group	Prefeasibility Design of "50MW Vagalat PV Power Plant Albania", ***Vlorë, Albania***
2022	GIZ GmbH	Energy Audit and Detailed Photovoltaic Project for the Municipality Building, ***Elbasan, Albania***
2022	OST	Supervision of the works contract for the "Construction of the new 220 kv double line Fier - Hoxhare district with ACSR 490/65 conductor, as well as the construction of the new 220/110/20 Kv Hoxhare substation, together with two 220 kv line exits, ***Fier, Albania***
2022	Dragobia Energy sh.p.k.	Detailed Design and Supervision Services for HPP Dragobia 23.2 MW (Albania) ***Dragobia, Albania***
2022	Infotelecom – Albsolar 1	Preparation of the Detailed Design of "PV Plant 50MW Alb-Solar 1", ***Lushnje, Albania***
2022	KESH sh.a.	Supervision of works for intervention and maintenance of CO2 systems in HPP Fierze and HPP Koman, ***Albania***
2022	C&M Engineering S.A.	Project Review & Preparation of Topographical Study for TAP Fier South Station Area, ***Fier, Albania***
2021	GIZ GmbH	Study preparation for photovoltaic panels, ***Albania***
2021	Voltalia	Hydrological, topographical and cadastral study for the Solar Plant 100 MW in Spitalle, ***Durrës, Albania***
2021	Power Voyage & Bini-X	Feasibility study for the 100 MW photovoltaic plant located in ***Klinë, Kosovo***
2020	Brecani R.O.S.P	Detailed design of 1.98MW Drita Hydropower Plant ***Tropojë, Albania***
2019	Voltalia	Drainage, flooding, geotechnical and land acquisition services for the 100 MW photovoltaic plant located in Spitalle ***Durrës, Albania***
2020	Tractabel	Local services for the design of floating 12MW photovoltaic panels in ***Vau i Dejës Albania***
2020	Voltalia	Drainage, Flooding and Land Acquisition Services for the 140 MW Photovoltaic Plant Located in Karavasta ***Fier, Albania***
2020	Trans Adriatic Pipeline AG Albania	Supervision of Civil Works for pipeline, stations and offshore for Trans Adriatic Pipeline, section in Albania
2020	TSO sh.a	Consultancy and Training for Consolidation of Energy Exchange and Day-Ahead Market ***Tirana, Albania***
2019	AlbStar	Due Diligence of 14.9MW Grabove 1 Hydropower Plant ***Gramsh, Albania***
2018	Non-Public	Pre-Feasibility Study of 250 MW PSHP (Pumped Storage Hydropower Plant) ***Kosovo***
2018	Non-Public	Pre-Feasibility Study of Photovoltaic Plant (PV) 500 KW, Vorë, Tirana District ***Tirana, Albania***
2018	Non-Public	Pre-Feasibility Study of Photovoltaic Plant (PV) 10 MW, Fier Municipality ***Fier, Albania***
2018	Illyrian Consulting Engineers sh.p.k.	Pre-Feasibility Study of Photovoltaic Plant (PV) 2 MW Tërbuf, Divjaka Municipality, Fier District ***Fier, Albania***
2018	Pöyry Italy S.r.l.	Due Diligence of Construction and Environmental Permits and Authorizations of Sekë 12.7 MW and Zais 2.3 MW HPPS ***Diber, Albania***
2019	Pöyry Austria GmbH	KESH Restructuring - Climate Risk Management Plan ***Tirana, Albania***
2017	O.S.T. sh.a.	Supervision Services for Empowering of Switchyard of Bistrica 110/154 KV (Albania) ***Sarande, Albania***
2017	Non-Public	Feasibility Study and Detailed Design For HPP Ljusa 1.98 MW (Albania) ***Mat, Albania***
2016	Trans Adriatic Pipeline AG Albania	Licensed Supervisor Engineering Services for TAP Access Roads and Bridges in Albania - ***Korça, Fier Albania***
2016	Asprofos & CM Engineering	Licensed Designer and Permitting Engineering Services for TAP Pipeline (211 km) and 9 Block Valve Stations (BVS) in ***Korça, Fier Albania***
2015	Asprofos & CM Engineering	Design of Storm Water, Sewerage Systems and Wastewater Treatment Plant for TAP Compressor Station ACS03 in ***Fier, Albania***
2015	Asprofos & CM Engineering	Licensed Designer and Permitting Engineering Services for TAP Metering Station ACS02 in ***Bilisht, Albania***
2015	Asprofos & CM Engineering	Licensed Designer and Permitting Engineering Services for TAP Pipe Yards and Camp Sites in ***Korça, Fier Albania***
2014	Not Public	Bankable Feasibility Study of a River Cascade 25MW ***Tirana, Albania***
2014	EUROKOS	Bankable Feasibility Study of HPP Lepenci 1&3, 18 MW ***Kosovo***
2014	3POWER (Switzerland)	Review of Feasibility Study of Shala HPP 126 MW ***Shkoder, Albania***
2013	Not Public	Bankable Feasibility Study of HPP 3 (1.2MW) and HPP 4 (3.5MW), ***Albania***
2012	Teodori 2003 sh.p.k	Bankable Feasibility Study of HPP Zall-Bulqiza 5.6 MW ***Diber, Albania***
2012	Teodori 2003 sh.p.k	Detailed Design of Hydropower of Ternova 8.3 MW ***Diber, Albania***
2010	BLE-KLO-AR sh.p.k (Albania)	Feasibility study of 3 HPPs in Gramshi district; detailed design and supervision of HPP Tervoli 10 MW ***Gramsh, Albania***

Highlighted Projects In Buildings & Infrastructure Sector

Year	Client	Project Name
2026	Agenzia Italiana per la Cooperazione allo Sviluppo	Archeological Conservation Plan and Detailed Conservation Projects for the Archeological Park of Bylis and Klos, ***Albania***
2026	OSCE Mission in Albania	Design and Supervision services for the project "Assisting the National Authorities of the Republic of Albania to Decrease the Risk of Weapon Proliferation and Misuse of Small Arms and Light Weapons (SALW)", ***Tirana, Albania***
Ongoing	Aner Sh.p.k	Design Review and Supervision of Works for the extension of the Tower of Tirana International Hotel, ***Tirana, Albania***
Ongoing	Durrës Marina sh.a.	Supervision of Construction Works for the Beach Reclamation and Sea Pools, and Plots A01, A02, A03 & A04, ***Durrës, Albania***
2025	Albanian American Development Fund	Architectural and Engineering Design Review and Supervision of Construction Works for the "Revitalization of the Pyramid of Tirana" Project, ***Tirana, Albania***
2024	Water Supply and Sewerage Lushnje	Design Study Water supply of the villages of Goricaj, Sopez, Senesa, Ferras, Mërtish Khemishtaj, Spolate, Gradisht, Fier Seman, Gungas, Babunjë, and New Babubjë, ***Lushnje, Albania***
2024	Water Supply and Sewerage Dibër	Study Design Construction of the Cërrujë Waterwork, ***Bulqizë, Albania***
2022	Albanian American Development Fund	Urban requalification project and restoration of the TID prospectus area located within the Durres archeological park ***Durrës, Albania***
2022	Albanian Development Fund	Intervention to improve the environment and the urban landscape of the areas through interventions that evoke the tradition and authenticity of the areas of 100 villages, ***Albania***
2022	Concord Investment	Supervision of construction works of the project "San Nicolas Tourist Village," ***Vlorë, Albania***
2021	Albanian Muslim Community	Preparation of Technical Design for the reconstruction of the Shijak Mosque, ***Shijak, Albania***
2021	GECI shpk	Preparation of the Project Design for the construction of building 18 in the development area "5 Maji" ***Tirana, Albania***
2021	National Agency of Territory Planning	Preparation of the Compulsory Local Plan for Point Damaged Areas (POPs) of 42 individual dwellings, ***Lezhë, Albania***
2020	National Agency of Territory Planning	Drafting of the Compulsory Local Plan for Point Damaged Areas (POPs) of 205 individual dwellings, ***Kurbin, Albania***
2020	Albanian Development Fund	Preparation of Project Design for construction of the "Arif Halil Sulaj" and "Dan Bajrami" educational institutions, ***Kurbin, Albania***
2019	Concord Investments Sh.A	Architectural and Engineering Supervision Services for the Construction Works of the "San Pietro Resort", ***Durrës, Albania***
2019	Concord Investments Sh.A	Architectural and Engineering Supervision Services of for the Construction Works of the Tirana Industrial Park, ***Tirana, Albania***

Year	Client	Project Name
2018	Elbasan Municipality	Urban requalification of the Volunteer neighborhood, Preparation of the Skampa Theater project, Preparation of the Abdyl Paralloi school project ***Elbasan, Albania***
2018	Albanian Muslim Community	Supervision of Tirana Namazgah Mosque, ***Tirana, Albania***
2018	Albanian Muslim Community	Preparation Of Project Design Of Restauration And Geological - Engineering Estimation For The Mosque Of Plumbit, ***Shkodër, Albania***
2018	Albanian Muslim Community	Reinforcement of Foundations And Drainage Of Aleksin Gjin Mosque Square In Rusan, ***Delvinë, Albania***
2018	Ministry of Infrastructure and Energy	Preparation of Technical Rules for Designing, Construction, Production and Water Supplying, Collection, Treatment of Fresh and Polluted Waters. ***Tirana, Albania***
2019	Albanian Muslim Community	Architectural and Engineering Supervision Services of new Beder University Main Building, ***Tirana, Albania***
2017	Not Public	Engineering Services of new sport center in ***Kingdom of Saudi Arabia***
2017	Abkons Sh.P.K.	Architectural and Engineering Supervision Services of Bilisht High School rehabilitation, ***Bilisht, Albania***
2017	Banka Kombetare Tregtare (BKT) Sh.A.	Architectural and Engineering Supervision Services of BKT branches rehabilitation, ***Tirana, Albania***
2016	General Directorate for Water Supply and Sanitation - PIU	Design and Supervision of Durrës Sewerage Intervention, ***Durres, Albania***
2015	Asprofos Engineering S.A. - C&M Engineering S.A. (Greece)	Engineering Services from Local Licensed Engineer for TAP Pipe Yards and Camp Sites, ***Bilisht - Fier, Albania***
2015	Durres Container Terminal Sh.A.	Architectural/Engineering Detailed Design of Warehouse in Durres Port, ***Durres, Albania***
2014	TALHA sh.p.k.	Structural Detailed Design of the Multifunctional Building 8+1 Story in ***Shkoder, Albania***
2013	BLE-KLO-AR sh.p.k.	Structural Detailed Design of the Flour Factory 4 Story in ***Cerrik, Albania***
2013	Verein Phonix fur buldung, kultur und sport (Austria)	Structural Design of a Kindergarten with Gym, ***Austria***
2010	TEC & EPC (Japan)	Geotechnical Investigation for Project of "Sewerage System Improvement of Greater Albania Tirana-Construction Phase-Trunk sewer object" ***Tirana, Albania***
2009	Not Public	Architectural/Engineering Detailed Design of Warehouse in Sukth, ***Durres, Albania***
2008	Universalb Sh.A	Architectural/Engineering Detailed Design of Additional Storey in American Hospital of Albania ***Tirana, Albania***

Health & Safety

Our HSE Policy: No One Gets Hurt

ICE acknowledges safety as the cornerstone of cooperative management and always considers safety as the top priority in all business processes. We constantly encourage proper activities for health in all workplaces since, according to the concept of health and productivity management, employee health is of utmost crucial importance.

By rigorously adhering to safety-related laws, regulations, and rules, we always try to enhance the level of health and safety management in order to eliminate any occupational accidents. We endeavor to allay safety risks and foster a culture of safety where workers choose willingly, not compelled, to prioritize safety.

We encourage education and awareness about health and safety in order to increase knowledge and sensibility among all employees, including those in our associated firms, subcontractors, and partners. We strive to make workplaces more pleasant while also providing employees with the appropriate climate and spaces to improve their physical and mental health.

Governance

ICE is dedicated to integrity, and we abide by the uppermost standards of ethics and conformity while providing our clients with state-of-the-art solutions. Our stance on ethical conduct and compliance with local rules and regulations has been acknowledged by clients and other people all over the world.

As we continue to gain the trust of our customers by providing exceptional customer service and acting responsibly in everything we do, we are dedicated to integrity and ethical business practices. Our Code of Conduct, which describes the fundamental legal requirements we must adhere to and the broad ethical principles that will aid each of us in making the correct decisions when conducting business globally serves as the foundation for our integrity.

ICE's internal audit approach has an extensive range, guaranteeing that the outcomes are taken into consideration and dealt with by management. ICE's executive leadership team communicates frequently and directly regarding the importance of integrity and ethics to all ICE employees.

Sustainability and ESG at the roots of our Strategy

We are pledged to identify and implement sustainable solutions to the tests and issues the future will bring, whether we are designing roads and highways, delivering urban infrastructure projects, or supporting adjustments to climate change risks.

ICE is focused to be at the vanguard of the transition to a more just, ethical, inclusive, and low-carbon world. Our course of action is strengthened by a steady commitment to sustainability and environmental, social, and governance (ESG) issues, both in our undertakings and in the work we carry out for our clients.

We pride ourselves in knowing that our consultancy and design services are future-ready, agile, and sustainable. As we tackle to make sure our clients accomplish their business objectives, we also play our part in promoting and accelerating the green transition.

As one of the largest sustainability consultancies in the region, we partner with the world's leading organizations, crafting groundbreaking solutions to sustainability challenges and revealing viable opportunities that address the needs of today while preserving opportunities for tomorrow's generations.

Our distinct team of experts backs clients across the extent of their organizations to operationalize sustainability, strengthened by our deep technical expertise in focusing on their environmental, health, safety, risk, and social issues. We label this competence our "boots to boardroom" for its extensive model that ensures ICE builds up and optimizes strategic and technical solutions that advance goals on the terrain or at the executive plain.

Corporate Social Responsibility

We take pride in being an organization that addresses some of the world's biggest challenges. Corporate social responsibility (CSR) is a vital component of our values and an extension to our mission. Our CSR goal is to work with nonprofit organizations and our local communities to make a difference in society.

We look to the UN Sustainable Development Goals to develop initiatives for skill-based volunteering in order to accomplish this. This mainly entails utilizing our expertise in the field and our professional connections to create immediate and enduring contributions that lessen the disparities individuals experience.

Additionally, we work together to support philanthropic endeavors and spread awareness for a variety of issues that our employees are fervent about.

Rrëshen - Kalimash Motorway
Photo credits: ©ICE

TRANSPORTATION

TRANSPORTATION

We offer a wide range of services starting from feasibility studies, investigations, detailed designs to project planning and management.

Our experts are more than qualified to execute these services according to international standards, such as the FIDIC terms of the contract.

The result of our efforts is a society in balance, with solutions that simplify people's everyday lives and create opportunities for regions and cities to continue to grow and develop.

Roads

We work along with many senior designers that can provide engineering services for highways such as feasibility studies, environmental impact assessments, highway geometrical alignment, pavement design, overlay design, design of interchanges, design for safety, construction management plan, traffic signal design, traffic simulations, safety audits, highway drainage schemes, supervision of constructions works, post-construction monitoring and maintenance design.

Bridges

Our professionally experienced staff can design bridges with different types of foundations, like deep piled foundations, shallow foundations, reinforced earth foundations, scour control and prevention; Different types of piers; Different types of superstructures such as prestressed or post-tensioned girders, steel girders, reinforced concrete decks; Overpasses and underpasses for pedestrians and vehicles, suspension footbridges, pipe and box culverts; Retaining structures of different heights and different types such as Masonry walls, gabion walls, concrete gravity walls, reinforced concrete walls, piled walls, reinforced earth structures.

Rrëshen - Kalimash Motorway
Photo credits: ©ICE

Railways

Railway transportation is now again receiving attention as a result of rising mobility demands, environmental regulations, and resource conservation initiatives.

While the development of high-speed rail lines is focused on the transportation of passengers, the modernization and rehabilitation of existing standard and narrow gauge lines is focused on the transportation of both passengers and freight. Railway transportation is more appealing as a result of infrastructure modernization.

ICE has made a substantial contribution to the execution of several railway engineering projects. ICE offers engineering services for both railway systems and civil engineering projects. This makes it possible for ICE to offer complete engineering services for all fields related to railway projects.

Project Name: Supervision of the Construction Works of the Motorway Rreshen Kalimash
End date: 12/2009
Client: General Roads Directorate of Albania
Location: Albania

Description: The project consists of 60 km motorway with 2x2 lane facility fully equipped with high slopes and with 25.2 million c.m. of excavation, 9.8 million c.m. of embankment, 27 viaducts of total length 4090m, 116 culverts, 2670m in total length of r/c retaining walls, 1410m in total length of reinforced earth retaining structures, 2413 m in total length of gabion walls, 9 interchanges. The road passes through one twin tunnel 5500m long.
The contract for the provision of supervision services was in the form of sub-consulting to the appointed main international consultant, IGH d.d - Croatia. ICE provided more than 25 professionals for daily inspection and supervision and other services like design review and project coordination.

The main services provided:
- Design review
- Inspection of road works
- Inspection of structures
- Geotechnical inspection of slopes
- Inspection and approval of materials
- Surveying of the works and quantity measures
- Inspection of Tunnel works and rock quality degree
- Project coordination
- Complete design review of existing roads to be relocated.

Photo credits: ©ICE

Project Name: Detailed Design of the Highway: Tirana - Elbasan Road
End date: 2011
Client: Albanian Road Authority
Location: Tirane, Albania

Description: The project consists in the detailed design of a 6-lane wide highway, 2 through-trac lanes and 1 emergency lane in each direction.

The highway is 22 km long with 12 bridges and viaducts, 1 overpass, 5 underpasses, many box culverts, river protections, and many retaining walls both r/c and reinforced earth type.

Also, right-of ways were considered too. Road safety aspects were carefully treated.

The expropriation plans and documentations also were prepared. ICE performed engineering services for minor and major works of arts such as design for construction of 6 viaducts, 6 bridges, 4 overpasses, and more than 50 box and pipe culverts of various dimensions. ICE carried out geotechnical investigation, hydrological study and design of few river protection measures.

The main services provided within this Project:

- Hydrological study
- Geotechnical investigation and report
- Environmental report
- Design of drainage structures
- Design of viaducts
- Preparation of technical specications
- Preparation of Bill of Quantities.

Photo credits: ©ICE

Project Name: TAP Access Roads and Bridges
End date: 12/2016
Client: Trans Adriatic Pipeline
Location: Albania

Description: The Trans Adriatic Pipeline (TAP) has a key role to play in securing the long-term diversity and security of Europe's energy supply. This pipeline will connect Western and South-Eastern Europe to the abundant new gas sources in the Caspian basin and beyond.

The TAP Access Roads and Bridges includes the construction of 19 access roads of approximately 95 km, the construction of 2 new bridges, the refurbishment of 53 bridges.

The project consist in the supervision services as contemplated by relevant Albanian Legislation by duly licensed engineers in successfully accomplishing the supervision task, monitoring on site the construction activities for approval and certification in compliance with relevant Albanian Legislation for the access roads and bridges.

The main services provided within this Project are: interface with the Albanian Authorities in the position of the Licensed Supervisor, examine the inventory of the design drawings, technical specifications and BoQ, sign the orders to commence the works; keep the minutes of the works' commence and the setting of grade-stakes, signing the site handing over protocol, review/ assist in the adoption of the contracted BoQ as per Albanian Manual, monitoring the works during construction periods, working with all the Parties for the certification of payments; co-ordination with road works stakeholders; review, approving and signing of variation orders as needed, review in accordance with the environmental permit, approving the materials and quality of the works in accordance with the Albanian Legislation, examine and attend the measurement of any work that is about to be covered, participation in the technical/ progress meetings if required, certify the completion of.

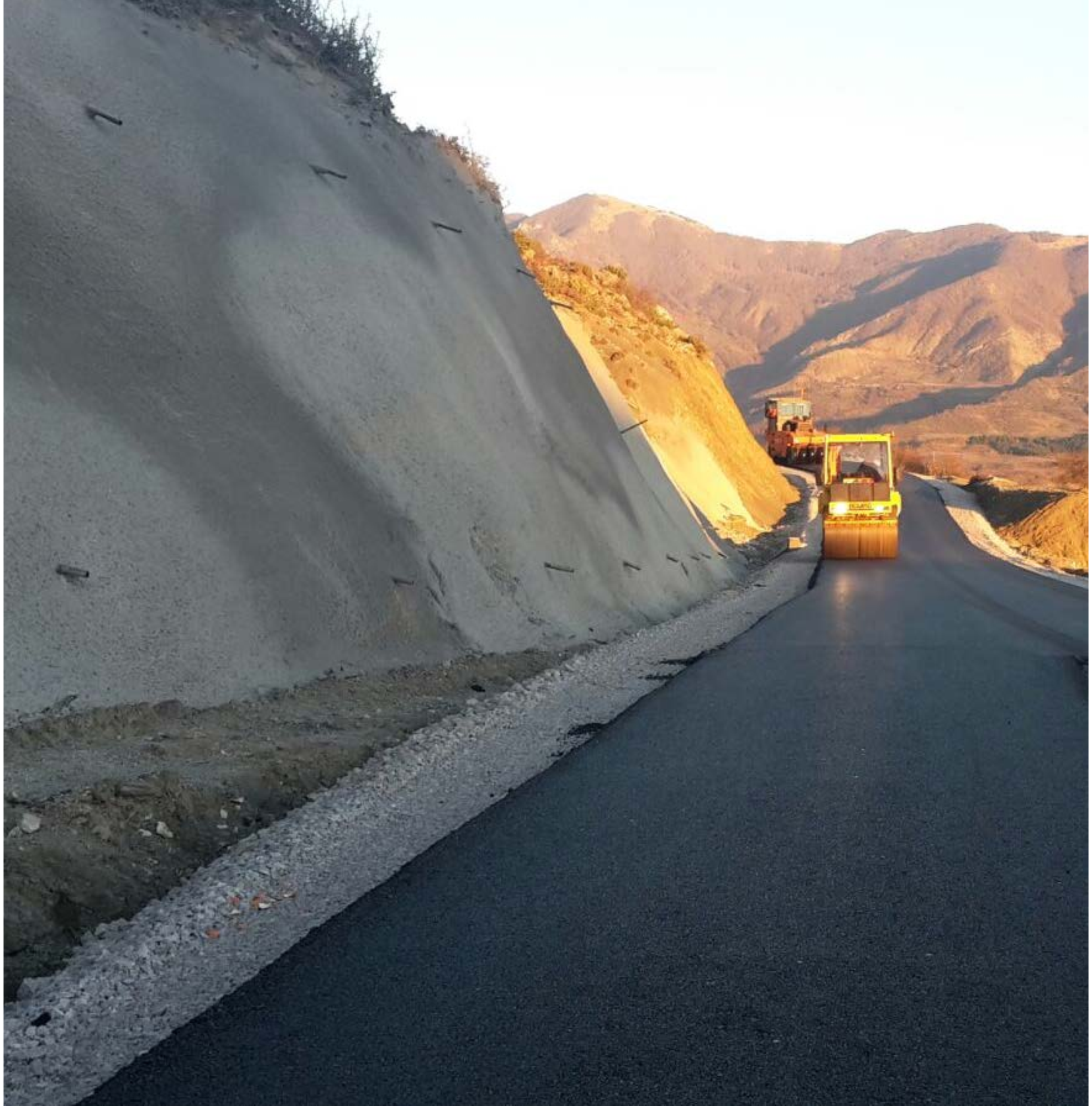


Photo credits: ©ICE

Project Name: Supervision of Construction Works for Regional Roads
End date: Ongoing
Client: Technital S.p.A.
Location: Kosovo

Description: The four supervision work contracts include the rehabilitation of a road section with a length of about 11 km Kllokot - Gjilan as well as the improvement of access roads with a total length of 11.6 km in the cities of Prizren, Ferizaj and Gjilan. The contracts are structured as follows:

- Improving the access road to the city of Prizren with a length of about 3.0 km;
- Rehabilitation of road N25.3 from Kllokot to Gjilan with a length of 11 km;
- Improvement of the access road N25.2 in Gjilan with a length of 3 km;
- Improvement of the access road in the city of Ferizaj with a length of 5.6 km;

The main services provided:
Review the works contract documents including detailed engineering designs, technical specifications and bills of quantities for all works and prepare a Design Review Report with comments and preliminary suggestions on necessary design changes.

Administering and supervising the work contracts as per FIDIC Red Book.

Photo credits: ©ICE

Project Name: Urban Requalification of Golem Touristic Region

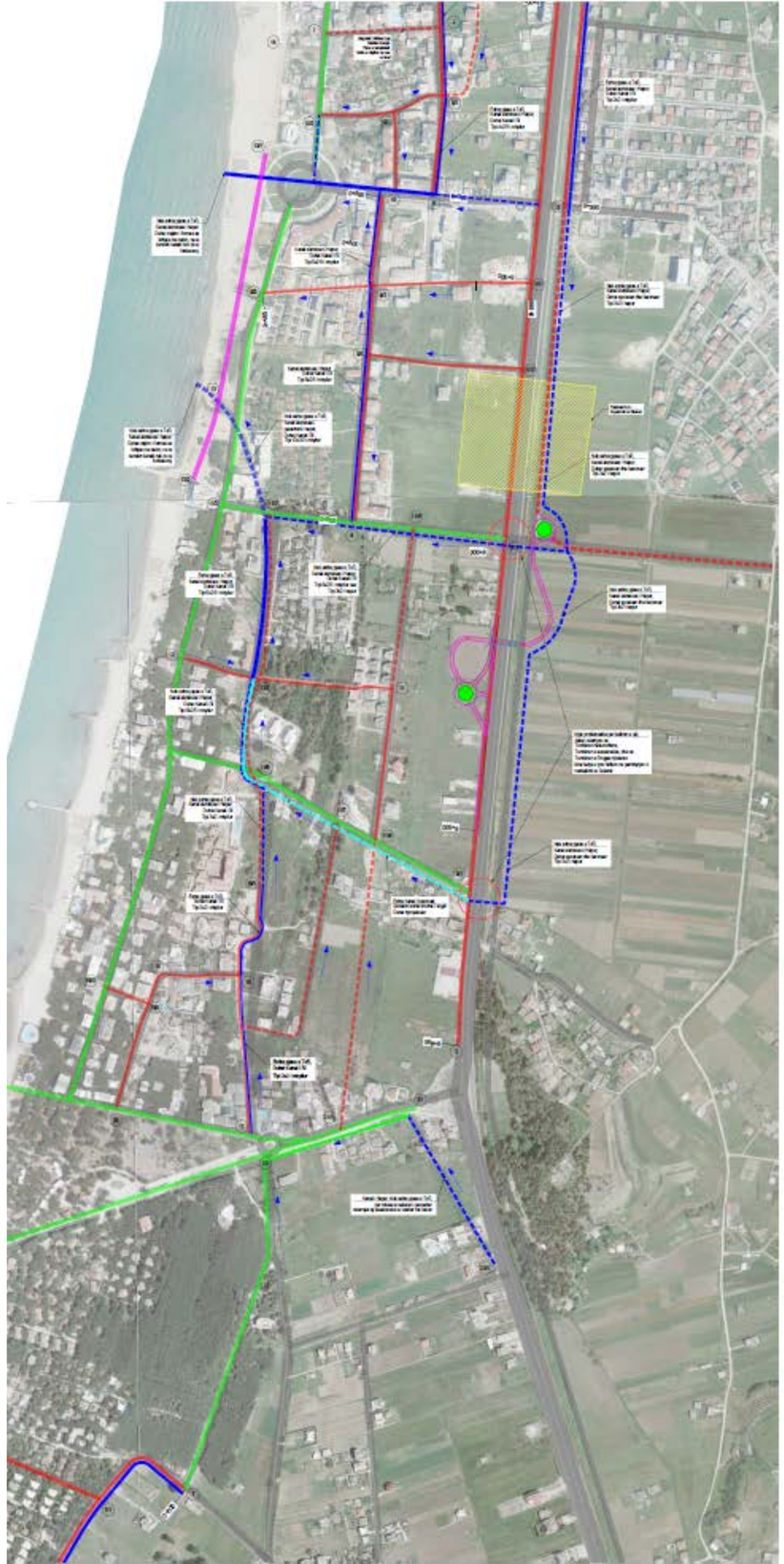
End date: 2021

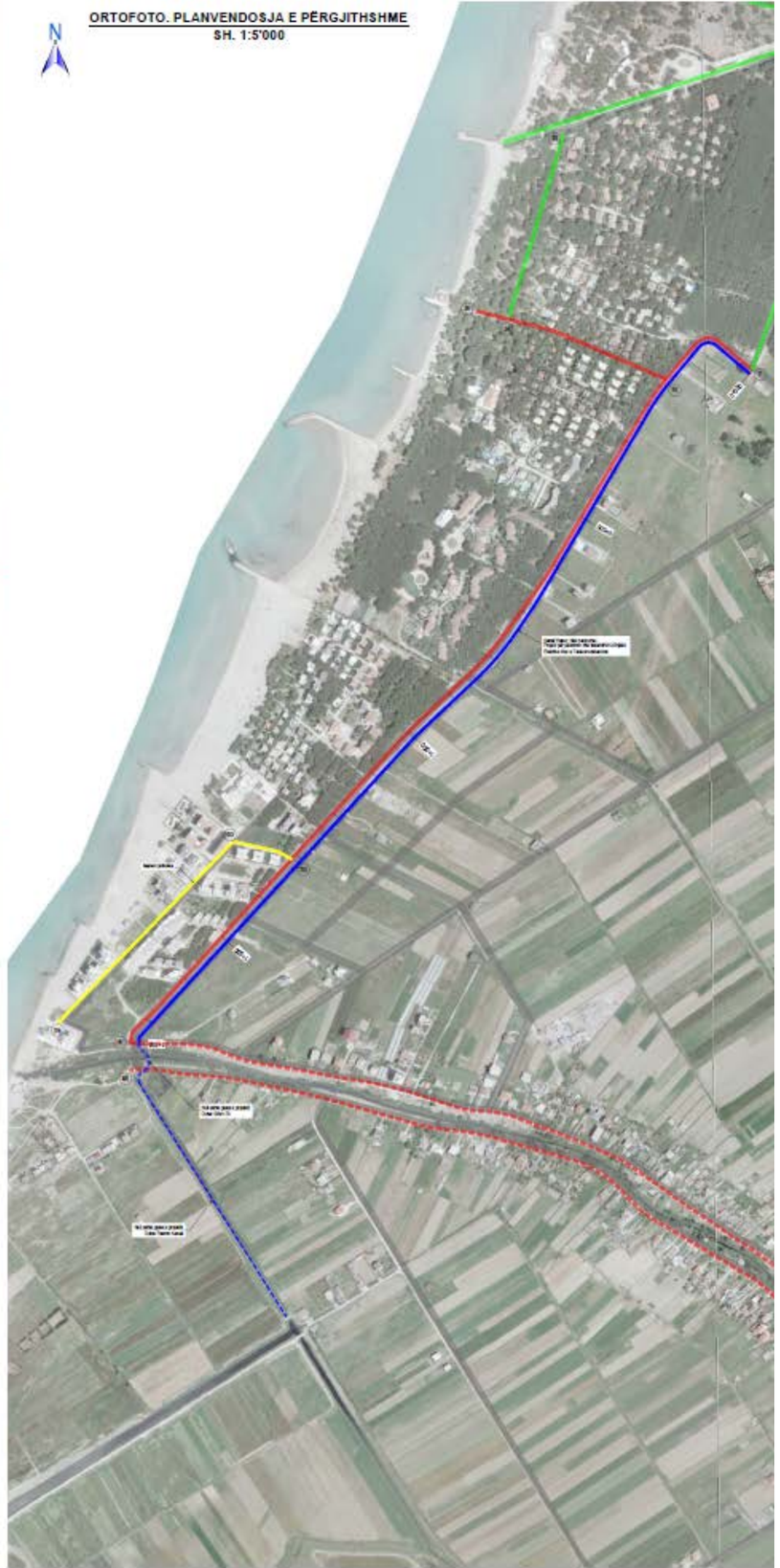
Client: Albanian Development Fund

Location: Kavajë, Albania

Description: After the earthquake of November 26, 2019, the government of Albania launched a plan for the reconstruction of the damaged areas, including the territory of the municipality of Kavajë. The relevant authorities in cooperation with the government, in response to the damage caused by the earthquake have charged the ADF as the contracting authority responsible for the development of the affected areas. The design task was the preparation of the Implementation Project of the public infrastructure for social housing in the defined area.

The project intends to improving access to tourism potential of the area, increase the quality life of the community and vacationers, increase the opportunities for sustainable economic development of the tourist area and improving and facilitating the circulation of the transport vehicles. To achieve mentioned objectives, 26 km of road, channels and boulevards will be designed. Also the overpass project with a 36m light span over the main interurban road near Golem has been designed, which will connect the two secondary roads with each other. An interchange will also be provided (Underpass or Overpass) which will be located between the “Plepa” roundabout and “Mali i Robit” intersection





and will connect the secondary roads with each-other. Parking areas, green spaces and squares will be foreseen in areas with high construction intensity. The project also includes underground infrastructure such as water supply, water sewers rain, electrical infrastructure and lighting. Various aspects of road safety have been carefully addressed and the signage project has been designed horizontal and vertical roads

The main services provided:

- Design of roads and pavements, Works of Art structures such as: underpasses, culverts, retaining walls etc., manholes, pipes structures, road drainage, etc., lighting, traffic signs and road markings.
- Systematization of squares and urban furnishing
- Drafting of technical specifications.
- Drafting of the environmental impact report
- Geotechnical & Seismic studies
- Preparing bill of quantities.
- Preparing technical reports and technical specification
- The environmental impact assessment report in accordance with Laws in power and relevant by-laws (for permit renewal) and in accordance with the World Bank’s Environmental
- Assessment policies (OP 4.01); for Natural Habitats (OP 4.04); for Physical and Cultural Resources (OP 4.11) and In voluntary Displacement (OP 4.12)

Photo credits: ©ICE

Project Name: Preliminary Design Project for the Rehabilitation of Corridor VIII Rrogozhina - Pogradec Section

End date: 05/2024

Client: IPF Consortium lead by Safege

Location: Albania

Description: The existing railway line, from Rrogozhina to Pogradec, has a total length of 119.5 km, has been constructed in sections from '50s to '70s and includes 12 stations. It has been designed to serve both freight and passenger operations. It has a 1435mm normal gauge width and 5.5m superstructure width, narrower than the standard of 6.0m. The overall objective of the Project is the contribution to the phased rehabilitation and improvement of the Corridor VIII in the territory of Albania.

The main services provided:

- Preliminary design of road level crossings
- Preparation and development of all minor structures (such as retaining walls, station platforms, box/pipe culverts, small bridges).
- Design of large structures, bridges and viaducts.
- Architectural Preliminary Design preparation for 12 existing RW stations including Electro-mechanical, HVAC and squares of respective stations (full package)
- Expropriations and utilities relocation
- Procurement documentation
- Geodetic surveys

This Corridor consists of 5 viaducts, 111 bridges, 370 culverts, 57 underpasses and 12 overpasses.

Photo credits: ©ICE

Project Name: Extension of "Gjergj Fishta" & "Bajram Curri" Boulevard and Rehabilitation of Lana River

End date: 08/2017

Client: Municipality of Tirana

Location: Tirana, Albania

Description: In accordance with the approved urban plan of Tirana, is foreseen the continuation of two Boulevards "Gjergj Fishta" and "Bajram Curri" parallel with Lana River, as well as the rehabilitation of Lana River. This section is approximately 1.8 km and is situated from "Ura Teknologjike" up to the intersection of Lana River with "Teodor Keko', known as the New Ring.

The scope of the project will be a comprehensive solution to the rehabilitation of Lana River and the extension of the two Boulevards according to the approved urban plan including all the necessary engineering and urban infrastructure.

The main services provided:

- Design of roads, road pavements, traffic signs and road markings Design Road pavements
- Urban design
- Design of structures such as: bridges, post-tensioned girders, abutments, retaining walls
- Design of sewerage and drainage networks, design of lighting system
- Design of electrical network, IT network, water supply, gas supply, landscaping and irrigation system for green areas.

Photo credits: ©ICE

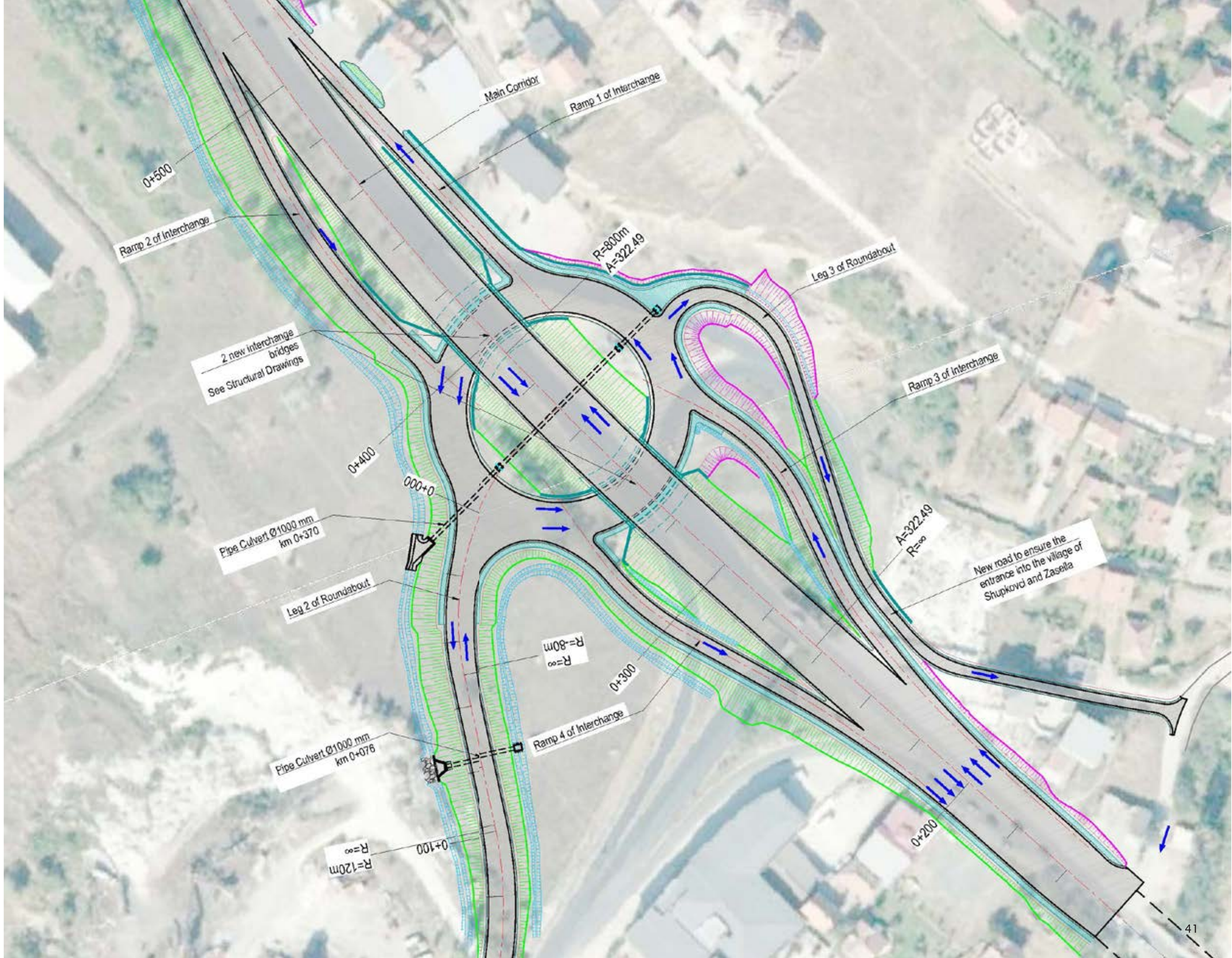
Project Name: Upgrading Milloshevë - Mitrovicë N2 Main Road
End date: 11/2019
Client: Ministry of Infrastructure - SFD Funded
Location: Kosovo

Description: Project consists in detailed design of a 6-lane wide highway, 2 through-traffic lanes + 1 emergency lane in each direction and design review of existing project of 10 km highway. ICE has performed engineering services for minor and major works of arts such as design for construction of 1 underpass, and more than 12 box and pipe culverts of various dimensions.

ICE carried out geotechnical investigation, hydrological study and design of few river protection measures. B. Addendum No. 1 — Mitrovice Interchange

After the submission of the 5 km Detailed Design mentioned above it was requested from the Project Management Unit (PMU) the detailed design of Mitrovica Interchange which is an important node in the traffic circulation of Mitrovica Municipality.

Photo credits: ©ICE



Project Name: Design review of the Reconstruction Project of the roads Mutsamudu-Sima, Sima-Bongoueni and Sima-Bimbini in Anjouan Island, Union of Comoros
End date: 2020
Client: Islamic Development Bank
Location: Comoros Islands

Description: The Project is an emergency project to rehabilitate the road and to remedy the damage that has occurred on the network and to adapt it to international standards. The specific objectives of the project were to restore and secure the conditions of transport of people and goods and reduce people's vulnerability to future natural disasters. The specific scope of this project was the review of the existing design that has been done for the road reconstruction.

The services provided for this project included but were not limited to: verifying and reviewing all the design documents including 'the applied standards, topographical survey, design drawings, geology, hydrology, temperature data and other climatic features, ecologically sensitive features, sources of locally available construction materials, traffic data and safety, maps, statistics, socioeconomic conditions etc.

Photo credits: ©ICE

Project Name: Traffic Mobility and Traffic Lights of Shkodër Municipality
End date: 12/2018
Client: Municipality of Shkodër
Location: Shkodër, Albania

Description: Shkodra Municipality is one of the most important municipalities of Albania from the demographic, historical and economic point of view. The project deals with the feasibility study of traffic, mobility and road signals in Shkodra Municipality. Through the City Transport study, it is aimed at addressing mobility issues. Despite the efforts made in recent years, where the most important is the provision of the pedestrian zone in the center of the city, there are still problems related to mobility in this city dealing with the movement of pedestrians, bicycle users, traffic management and transport public.

The main services provided:

- Revision of current traffic scheme of vehicles, pedestrians and cyclists
- Survey of demand and supply for transport
- Drafting a mid-term and long-term investment plan for improving the mobility of people and businesses in the city of Shkodra
- Urban Traffic Model

Photo credits: ©ICE

Project Name: WBIF Project Facility Technical Assistance 8 (IPF 8) Corridor VIII Rail. Detailed Design for the Rehabilitation of the Durres – Rrogozhina Section, Albania

End date: 2021

Client: COWI IPF / European Investment Bank

Location: Tirane, Albania

Description: COWI A/S on 28 May 2019 as lead partner of the consortium COWI IPF (composed of: COWI A/S, CESTRA d.o.o., Egis International, ENVIROPLAN Consultants and Engineers S.A., GOPA Infra GmbH, GOPA International Energy Consultants GmbH, SYSTEMA Transport Planning Consultants SM Ltd., TRENECON Consulting and Planning Ltd., WYG International B.V., WYG International Danismanlik Limited Sirketi) has entered into a contract with the EIB covering the consultancy services for "Western Balkans Investment Framework, Infrastructure Project Facility – Technical Assistance 8 (IPF 8), Infrastructures: Energy, Environment, Social, Transport and Digital economy", to be carried out in Albania, Bosnia and Herzegovina, North Macedonia, Montenegro, Serbia, and Kosovo with identification number TA2018148 R0 IPA" which is financed from a direct contribution from EU IPA funds.

The Consultant COWI A/S on behalf of the Consortium requests that certain Services should be performed by ICE in respect to the Sub-Project "Detailed Design for the Rehabilitation of the Durres – Rrogozhina Section, Albania" and has appointed ICE under the Agreement to perform those Services.

Main activities performed in this project:

- Hydrological study and hydraulic design. Collection and processing of the available hydro-meteorological data of the study area (rainfall intensity data from stations near the study area for adequate period of years)
- Generation of IDF curves for time periods relevant to the railway project using either Gumbel distribution or other distribution.
- Checking and dimensioning of the existing and the new railway line and station drainage system.
- Calculated water volumes by means of non-uniform flow software (HEC-RAS), modelling all the bridges.
- Preparing technical reports and technical specifications for hydraulic structures.

Photo credits: ©ICE

Hydrology and Drainage Design / Watershed Mapping

Project Name: Mediterranean Corridor (Rail R2): Rehabilitation Of Vora/Vorë - Han i Hotit Railway Line (Albania)
End date: 2021
Client: IPF Consortium lead by Safege
Location: Tirane, Albania

Description: The project for the rehabilitation of the railway line Vora - Han i Hotit (border with Montenegro) is part of the indicative extension of the TEN-T Core Network in the Western Balkans.

This is Albania's international rail link, connecting the country with Montenegro and beyond. As such, the project has significant cross-border and therefore regional impact. In addition to carrying major in-country rail trac, the line connects Albania's domestic network to the regional and European railway networks through Corridor X.

The investment involves a complete overhaul of the entire railway line (120.2 km and 13 railway stations) for trac speed of up to 120 km/h, including the installation of a new signaling system and safety improvements.

Main activities performed in this project:

- Hydrological study and hydraulic design. Collection and processing of the available hydro-meteorological data of the study area (rainfall intensity data from stations near the study area for adequate period of years)
- Generation of IDF curves for time periods relevant to the railway project using either Gumbel distribution or other distribution.
- Checking and dimensioning of the existing and the new railway line and station drainage system.
- Calculated water volumes by means of non-uniform ow software (HEC-RAS), modelling all the bridges.
- Preparing technical reports and technical specication for hydraulic structures.

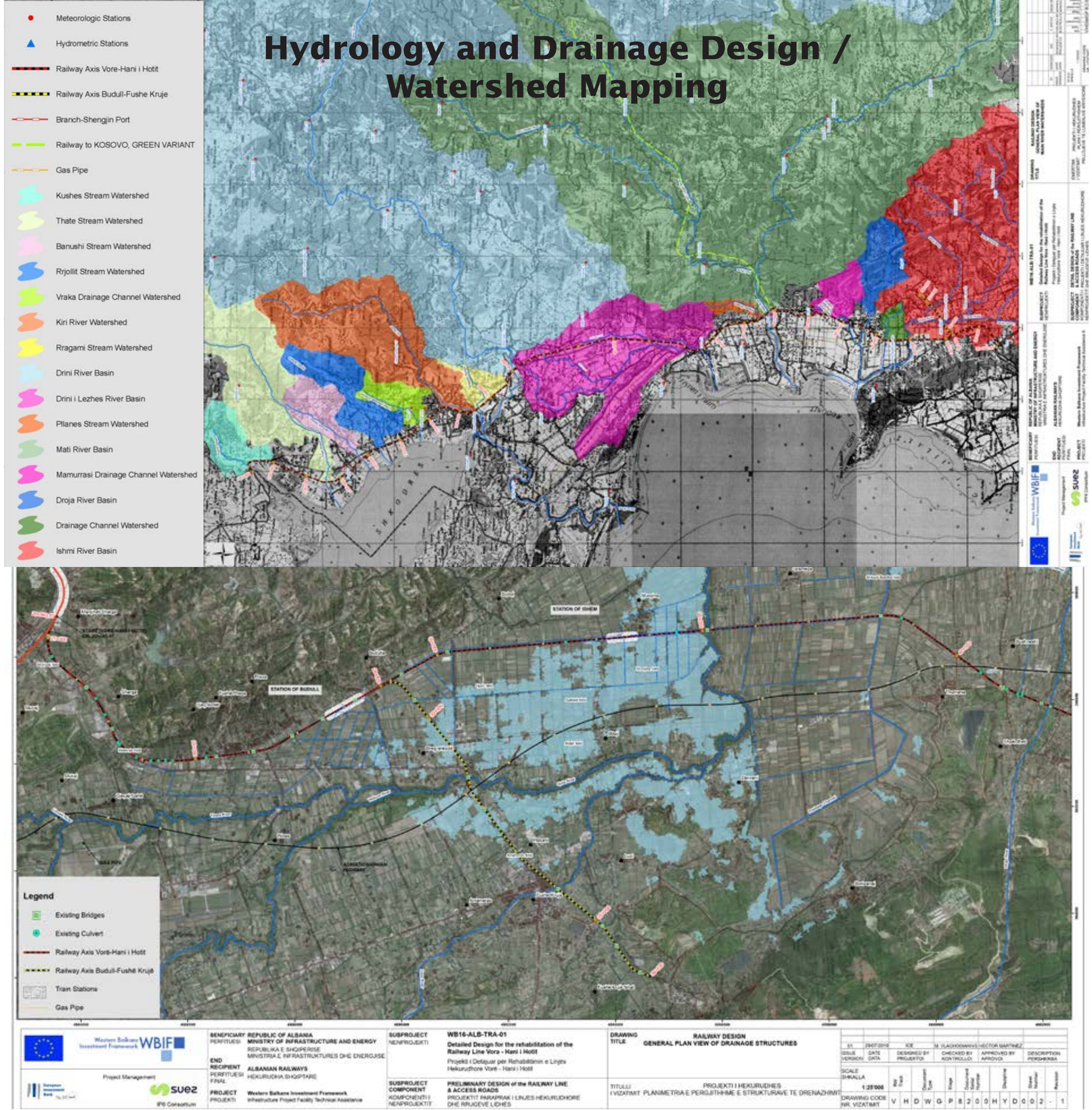


Photo credits: ©ICE

WATER RESOURCES

WATER RESOURCES

Water, as the most vital natural resource, is decisive for determining the built world and sustaining the natural environment.

Managing water resources efficiently and sustainably is direr than ever. Through effective planning, management, and rehabilitation of our water resources we can help build a sustainable and resilient future for businesses, communities, and the natural environment.

Climate change, urbanization, and amortizing assets are factors that constantly pressure on issues regarding water resources of communities, infrastructure, and ecosystems.

The consequent effects on storm water, water quality, water supplies, besides related changes in the regulatory scenery, present the need for an integrated approach with pioneering thinking.

Being the management of water resources such a critical issue, the crucial task of considering it at every stage of development becomes imperative for all communities.

In this context, our experts are used to working in interdisciplinary teams and complex projects.

For each one of our projects, we consider environmentally sustainable development an essential factor.

Our experts can provide sustainable solutions on products and services, to meet the continually increasing demands from all around ISO standards.

Here at ICE, you can reach a team driven by results for issues such as:

- River Protection & Restoration
- Hydrological Study
- Climate Change
- Flood Risk Assessment
- Water Supply & Sanitation
- Irrigation & Drainage
- River Basin Management.

Photo credits: ©ICE

Project Name: Durrës Sewerage Intervention
End date: 12/2016
Client: World Bank PIU
Location: Durrës, Albania

Description: The coastal city of Durres, located along the Adriatic coast is Albania's second largest city and its primary port. The Metropolitan area of Durres (including 5 municipalities and 10 communes in total) has a total population of about 330,000 people during the off peak seasons. The quality of sewerage services offered by the Durres Water Utility (DWU), which service area covers the municipality of Durres, is not very efficient, this referring that the storm water system is not separated from the sewerage system.

The scope of work consists in preparation of the design and supervision of the following activities:

- Rehabilitation of sewage collector, from Museum to pumping station no.8, 1080m long
- Rehabilitation of sewage collector, from Pumping Station no. 8 to Pumping Station no. 7, 2241m long
- Construction of sewage collector, from pumping station no.7 to pumping station no.9, 1340m long
- Envioronmental study.
- Geological study.
- Topografical study

Photo credits: ©ICE

Project Name: Detailed Design of Flood Protection for Orikum Marina from the Tragjas River**End date:** 06/2016
Client: Concord Investment
Location: Vlora, Albania

Description: Orikum Marina, with a capacity of over 600 berths, is a premier maritime destination located in the Dukat Bay, within the southern part of the Vlora Gulf. This vibrant waterfront development features 59 residential apartments along with a shopping center, restaurants, and a music hall. Designed to accommodate sailing boats and yachts, the marina is an integral part of a broader master plan that includes luxury hotels, vacation homes, high-end retail areas, recreational facilities, and a state-of-the-art water park.

The flood protection project focuses on safeguarding this prestigious development from potential flood risks posed by the Tragjas River. It includes comprehensive hydrological and hydraulic assessments, the design of flood mitigation infrastructure, and advanced 2D HEC-RAS modeling to ensure long-term resilience and sustainability. Through this initiative, the project aims to enhance the safety and functionality of Orikum Marina, supporting its role as a key hub for maritime tourism and luxury living in Albania

Photo credits: Concord Investment

Project Name: Design of storm water, sewerage systems and watewater treatment plant for TAP Compressor Station ACS03
End date: 12/2015
Client: Asprofos Engineering S.A. - C&M Engineering S.A.
Location: Fier, Albania

Description: The Trans Adriatic Pipeline (TAP) has a key role to play in securing the long-term diversity and security of Europe's energy supply. This pipeline will connect Western and South-Eastern Europe to the abundant new gas sources in the Caspian basin and beyond. Project consists in design (Drawings, Calculations. Technical Reports and Descriptions etc.) of storm water system, sewerage system and wastewater treatment plant for the Compressor Station ACS03 in Fier, Albania with an approximate area of 15 ha. The main aspects within this Project were: Storm water Drainage System Hydraulic Calculation, Sanitary Sewage Hydraulic Calculations, Surrounding Area Layout of Sanitary Sewage System, Surrounding Area Diagram of Sanitary Sewage System, Waste Water Treatment Plant Technical Report and Calculation.

The main services provided:
· Hydraulic calculation
· Design drawings
· Technical report
· Technical description
· Preparation of BoQ

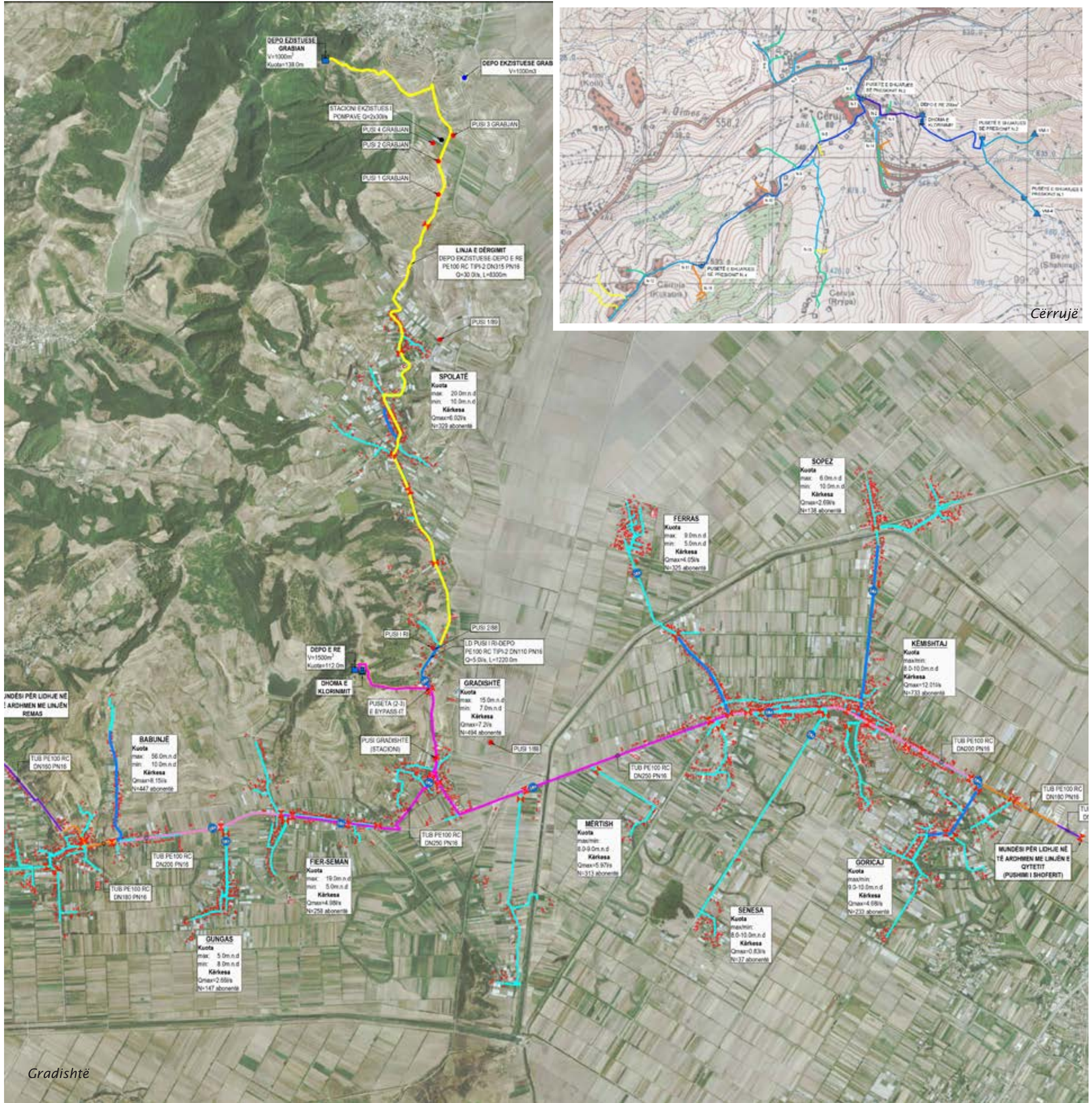
Photo credits: TAP

Project Name: Detailed Design for “Water supply of Goricaj, Sopez, Senesa, Ferras, Mërtish, Këmishtaj, Spolate, Gradishte, Fier Seman, Gungas, Babunje, Babunje e re villages”
End date: 02/2024
Client: Lushnje Regional Water Supply and Sewerage Company
Location: Albania

Description: Gradishtë is a municipality in the Divjakë Municipality. This project interests 12 villages of this municipal unit and some other small areas newly developed in recent years. These villages are located at a 2-8 m height from the average sea level, with many irrigation and drainage canals.

This projects aims at to achieve:
· 24-hour water supply to the villages of Gradisht administrative unit (planned for 25 years).
· Provision of a scheme designed for gravity operation;
· Elimination of wells and electric pumps for cases where it is possible;
· Designing the distribution network to provide water to consumer connections with 2-6 bar pressure, with quality water as per Albanian Standards and EU guidelines

The main services provided:
- Design of 1500m3 reinforced water tank, water well, transmission line, distribution network of water supply system
- Seismic study
- Hydrogeological study
- Environmental study
- Geological investigations
- Topographical study



Gradishtë

Cërrujë

Project Name: Detailed Design for the construction of “Water supply of Cerrujë”
End date: 02/2024
Client: Dibër Regional Water Supply and Sewerage Company
Location: Albania

Description: Situated in the northern part of Klos, Dibër the area of Cerrujë has a degraded and very amortized network built in the 1980s. This project aims to achieve
This projects aims at to achieve:
· 24-hour water supply to the villages of Gradisht administrative unit (planned for 25 years).
· Provision of a scheme designed for gravity operation;
· Elimination of wells and electric pumps for cases where it is possible;
· Designing the distribution network to provide water to consumer connections with a min. pressure of 2 bar and a max of 6.0 bar, with quality water according to Albanian Standards and EU guidelines

The main services provided:
- Design of 200m3 reinforced water tank, pressure reducing chambers, water intakes, distribution network of water supply system,
- Seismic study
- Hydrogeological study
- Environmental study
- Geological investigations
- Topographical study

Photo credits: ©ICE

Photo credits: ©ICE

ENVIRONMENT

ENVIRONMENT

The need to cope with the effects that developments have on our environment is ever increasing.

Ensuring that your products meet all applicable regulatory and commercial requirements is an ever more complex and critical task.

ICE delivers coverage and expert analysis of environmental regulatory matters relevant to products and components providing comprehensive environmental planning, assessment, management, and compliance services.

Considering environmental sustainability in developments an essential factor of utmost importance, our approach to each of our environmental planning and management projects consists in applying awareness, knowledge, creativity, and the principles of sustainability.

Our range of services in this area spans:

- Deliverables
- Strategic Environmental Assessment (SEA)
- Environmental and Social Impact Assessment
- HSE Systems and Compliance
- Due diligence
- Contaminated sites assessments
- Environmental and Social Management Plans
- Rehabilitation Plans
- Stakeholder Engagement Plan & Public Consultation

- Albanian Legal Procedures for Environmental Permit
- EBRD and World Bank Environmental and Social Framework
- Technical Assistance & Environmental Policy Support
- Occupational Health and Hygiene
- Audit, Inspection, Investigation, Environmental Expertise
- Air Quality and Pollution Management
- Waste Management

Our efforts translate into proven outcomes, including improved environmental, safety, and risk performance; enhanced staff efficiency and engagement; and better competitive advantage by reacting to environmental and sustainability prospects.

Photo credits: ©ICE

Project Name: Detailed engineering of 3 barriers in Lerini stream, a branch of Drini river, Shkoder district
End date: 2013
Client: KESH sh.a.
Location: Shkodër, Albania

Description: The project consisted in the detailed design of the three barriers on Lerini stream, a branch of Drini river in order to prevent deposits in the reservoir of the Koman HPP located in Shkodra.

The Lerini Stream has a 100 years return period flow of 211 m^3/s, and it discharges in the reservoir of the Koman HPP.

The structures handled technically by ICE are three gabion barriers with a maximum height of up to 13 m and a maximum length of up to 65 m.
The primary services provided within this project were as below:

- Surveying works
- Hydrological study
- Geotechnical investigation and report
- Hydraulic and structural design of barriers
- Estimation of Bills of Quantity
- Preparation of technical specifications

Photo credits: ©ICE

Project Name: Utilization of inert materials in the Buna riverbed EIA
End date: 04.2021
Client: Gener 2
Location: Shkodër, Albania

Description: ICE acted as the EIA consultant for the proposed extraction of river aggregates from the Buna River, supporting the road rehabilitation works. The aggregate extraction was required to supply fill material for the rehabilitation of the Shëngjin–Baks–Rrjoll road (13 km), under an EBRD-financed contract with the Albanian Development Fund.
Our contribution focused on preparing the EIA in accordance with Albanian legislation. The assessment covered the proposed extraction area located entirely within the riverbed of the Buna River, administratively within Shkodër, and evaluated its technical suitability, available reserves, and environmental sensitivity.
The EIA identified and assessed potential direct and indirect environmental impacts associated with aggregate extraction activities, considering baseline river conditions and the approved technical exploitation design. Particular attention was given to impacts on river morphology, water quality, aquatic habitats, and downstream processes. The study defined mitigation measures to minimize environmental disturbance and ensure controlled, sustainable use of river aggregates while supporting the timely delivery of a strategic road infrastructure project.

Photo credits: ©MedWet

Project Name: Thumanë-Kashar Motorway EIA
End date: 01/2024
Client: Gener 2
Location: Albania

Description: As the EIA consultant for the strategic road infrastructure project connecting the Milot–Thumanë Motorway with the Tirana–Durrës Motorway, ICE prepared the full EIA process in compliance with Albanian environmental legislation. The project, initiated in 2015, represents a key transport link within the national motorway network, improving connectivity between northern Albania, the capital, and the country's main port.

The EIA carried out by ICE systematically identified and assessed potential environmental and social impacts associated with the construction and operation of the motorway connection. Particular attention was given to impacts on land use, air quality, noise, biodiversity, water resources, landscape, and local communities affected by the infrastructure corridor. A central component of our work was the definition of targeted mitigation measures aimed at preventing, minimizing, and, where necessary, compensating for identified environmental impacts. In parallel, ICE prepared a comprehensive Environmental Monitoring Plan, establishing key environmental indicators and monitoring obligations to ensure ongoing compliance and effective environmental management throughout project implementation.

Photo credits: ©Gener 2

Project Name: Fierza Pumped Hydro Storage - Feasibility Assessment & ESIA
End date: 2024
Client: Fichtner & Co.KG
Location: Albania

Description: ICE acted as environmental and social advisor for the proposed EBRD-financed Pumped Hydro Storage project developed by KESH. Our role focused on delivering the environmental, social, and resettlement components of the Feasibility Study and ESIA, in accordance with Albanian legislation and the EBRD Environmental and Social Policy.
The environmental scope included a detailed water quality baseline assessment for the Fierza–Koman reservoir system, supported by the development of a laboratory monitoring plan and methodology, interpretation of laboratory results, and preparation of technical reports to inform impact assessment and mitigation measures.
On the social side, our contribution included a socio-economic baseline assessment and specialist social studies addressing community profiles, land use, livelihoods, and potential project-induced risks. Media searches and structured site visits were undertaken to identify contextual sensitivities, stakeholder concerns, and reputational risks relevant to project development. These inputs supported the assessment of potential social impacts and informed early resettlement risk screening in line with EBRD requirements.

Photo credits: ©IIA

Project Name: Vertical Forest Tirana EIA
End date: 03/2018
Client: Gener 2
Location: Tirana, Albania

Description: ICE supported the delivery of a landmark mixed-use residential project designed by Stefano Boeri Architetti. Our contribution focused on assessing, documenting, and enhancing the project's environmental performance in line with national legislation, international good practice, and the objectives of Tirana's General Master Plan.

The EIA evaluated the environmental implications of a 21-storey residential tower with commercial uses at ground level and four underground parking levels.

A key component of our assessment was the analysis of the project's nature-integrated design. The extensive system of balconies, loggias, and rooftop green areas—supporting approximately 100 trees and over 5,000 shrubs and plants—was reviewed from an ecosystem services perspective. The EIA quantified and described the project's contribution to air quality improvement through CO_2 absorption and fine particle capture, mitigation of the Urban Heat Island effect, and enhancement of the local microclimate for residents and adjacent public spaces.

The assessment also addressed biodiversity considerations, confirming that the use of more than 20 native and climate-adapted plant species, combined with vertical and rooftop greenery, would support urban fauna such as birds and insects and promote ecological coexistence within the built environment. Water resource management measures, including rainwater harvesting and efficient irrigation systems, were evaluated as effective mitigation measures to reduce potable water demand during operation.

Through the EIA process, environmental mitigation and monitoring measures were defined to ensure that both construction and operational phases remain compliant with environmental standards while maximizing positive impacts.

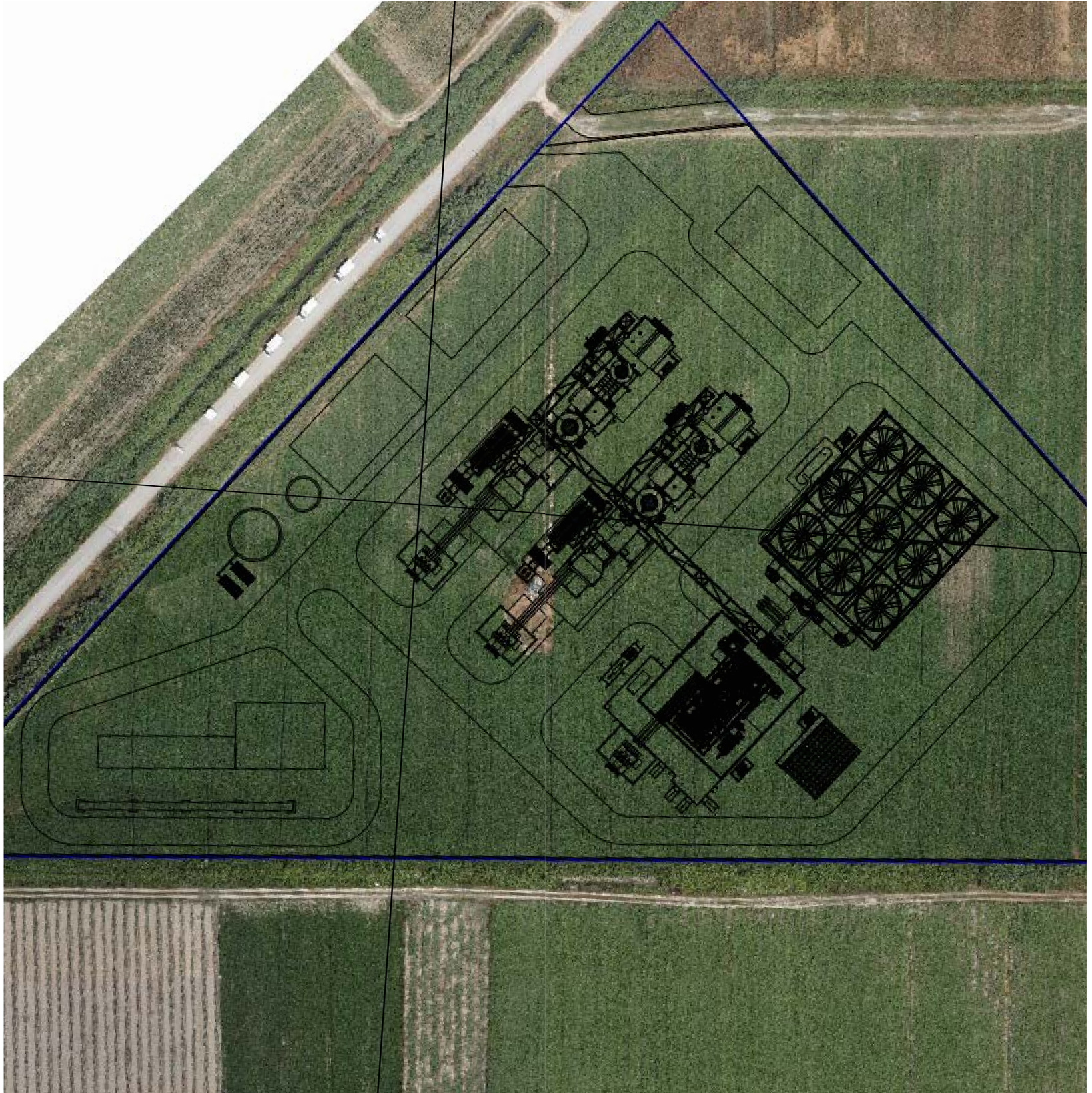
Photo credits: ©SBA

Project Name: TEC Roskovec Thermo Power Plant EIA
End date: 04/2023
Client: Fier Thermoelectric
Location: Fier, Albania

Description: As the Environmental Impact Assessment (EIA) consultant for the Combined Cycle Gas Turbine (CCGT) power plant project, ICE supported the environmental permitting and sustainability integration of a strategic energy development in Roskovec, near Fier. The project foresees the construction and operation of a natural gas-fired CCGT power plant with an installed capacity of 170 MW, based on high-efficiency modern technology achieving up to 57% efficiency at maximum load.

Our contribution focused on assessing and managing the environmental impacts associated with both construction and operational phases, while ensuring alignment with Albanian environmental legislation, EU standards, and international best practice. The EIA evaluated the project's location advantages, notably its proximity to the Trans Adriatic Pipeline and the national high-voltage electricity transmission network, which together ensure fuel security, grid reliability, and reduced transmission losses.

A core element of our assessment addressed the project's role within Albania's energy system. The EIA demonstrated that the CCGT plant will significantly contribute to increasing domestic electricity generation capacity, diversifying the national energy mix, and improving the balance between hydropower and other generation sources. By providing flexible and reliable baseload and peak power, the project reduces dependence on electricity imports and strengthens national energy security, particularly during hydrologically dry years.



From an environmental and territorial perspective, ICE assessed the interaction of the project with nearby surface water resources. Potential impacts on water quality, hydrology, and aquatic ecosystems were evaluated, and appropriate mitigation and monitoring measures were defined within the EIA.

Through the EIA process, our team identified, assessed, and mitigated potential environmental risks related to air emissions, noise, water resources, land use, and cumulative impacts, while highlighting the project's positive contribution to Albania's energy transition and economic development. Overall, ICE's work supported the positioning of the Roskovec CCGT power plant as an environmentally compliant and strategically important infrastructure project, contributing to a more stable, diversified, and investment-attractive energy market in Albania.

Photo credits: ©ICE

Photo credits: ©ICE

BUILDING SCIENCE

BUILDING SCIENCE

Through an experienced and meticulously focused staff of Architects and Engineers, ICE operates as a one-stop shop, delivering state-of-the-art design and supervision services for buildings of various purposes of usage such as residential buildings, resort areas, hospitals, schools, institutional facilities, and cult buildings.

We offer a full package of design and supervision services in all its trade like architectural, structural, mechanical, and electrical works, utilizing recent materials and features of construction like r/concrete, steel structures, masonry works, recent finishing materials, building management systems, drainage and irrigation systems, analysis and design of structures, architectural services for interior and landscape design, refurbishment of existing buildings, etc. We incorporate cutting-edge technologies with all the traditional building sciences and architecture to deliver the very best solutions.

Photo credits: ©ICE

Project Name: Durrës Yachts & Marina
End date: Ongoing
Client: Durrës Marina (EMAAR)
Location: Durrës, Albania

Description: The Durrës Yachts & Marina Project is a major mixed-use coastal development aimed at repositioning Durrës as a leading destination on the Adriatic coast. The project combines contemporary architecture with the city's natural and historic setting, delivering a luxury marina, high-end residential developments, vibrant commercial and recreational spaces and an enhanced urban waterfront.
Opposite the historic center of Durrës, the development covers about 840,000 sqm, and is being implemented in two phases, including the expansion of the coastline and the redevelopment of the Port of Durrës.

ICE acts as a strategic partner, playing an active role through a series of ongoing contracts, including:

- Masterplan Interdisciplinary Design Check and Peer Review
- Redesigning Services for the Phase 1 Infrastructure, Wet Utilities and Electrical Infrastructure Redesign
- Preparation of Masterplan and Infrastructure Tender Documents
- Construction Supervision and Commissioning of Phase 1 Infrastructure and landscape works, Beach reclamation and sea pools, the Bristol Hotel (H01), and Residential Buildings A01, A02, and A04.

Photo credits: Durrës Marina

Project Name: Urban requalification project and restoration of the TID prospectus area located within the Durrës archeological park
End date: 03/2022
Client: Albanian American Development Foundation
Location: Durrës, Albania

Description: The main goal of the project is to increase tourism and in consequence the economic development of the area through restoration, conservation and the rehabilitation of the traditional houses, plazas, roads/paths within the indicated area. The objective will be pursued through urban attenuation interventions, restoration of buildings (including demolition and reconstruction), rationalization of public areas and the system of road, cycle and pedestrian and parking lots. To pursue urban, construction, archaeological, tourist and social objectives, a project related to the arrangement of buildings, the creation of a large archaeological park, the improvement of architectural emergencies, a new mobility system and environmental reassessment have been studied.
The main services provided:

- Detailed survey of terrain, buildings and infrastructure
- Urban/Architectural Design
- Landscape Design
- Restoration/Consolidation
- Archaeological sondages
- Street and Pavement Design
- Design of water supply, sewerage and rainwater system
- Electrical design
- Structural design of different elements
- Environmental evaluation

Photo credits: ©ICE

Project Name: Revitalization of the Pyramid of Tirana
End date: 09/2024
Client: Albanian American Development Foundation
Location: Tirana, Albania

Description: The project has transformed one of the most significant remaining monuments of communism in Europe into a multifunctional technological education centre for young people.
The Pyramid of Tirana was revitalized into a public meeting place that offers entertainment, recreation, and opportunities for social and physical interaction in indoor and outdoor spaces. The project design has been comprehensive, including interventions in all major disciplines. The renovation project included work on architecture, construction, electrical, lighting, mechanical, and hydraulic networks, fire protection systems, and the surrounding areas.

The services provided for this project:

- Architectural and engineering design review
- Supervision of construction works
- Ensuring that the works are carried out following the highest quality standards, both domestically and internationally
- Assisting the Client and Beneficiary in monitoring the implementation of the construction contract and project management.

Photo Credit: MVRDV

Project Name: Tirana International Hotel
End date: Ongoing
Client: Aner shpk & Geci shpk
Location: Tirana, Albania

Description: Tirana International Hotel & Conference Center is the largest and most prestigious hotel and conference center in Albania, situated in Tirana's Central Square and recently renovated from top to toe in 2018. The project consists in increasing the hospital capacity of the existing Hotel with a 133.5m tall, 33 story building This expansion will provide the addition of a total of 300 rooms and suites, a large conference center with a capacity of up to 1000 people for MICE, luxury spa and a rooftop restaurant all commercial and recreational facilities.

The services include detailed design review, quality, quantity and time schedule control for the construction works. The supervision services have three phases:
Phase I: Reinforced Concrete/ Civil Engineering Works.
Phase II: The refinishing works will continue simultaneously with the installation of electrical and mechanical systems.
Phase III: After the reinforced concrete works/construction, the refinishing and electrical and mechanical installation systems will be completed.

Photo Credits: TIH

Project Name: Namazgah - The New Great Mosque of Tirana
Completion: 10/2024
Client: Muslim Community of Albania
Location: Tirana, Albania

Description: The Tirana Namazgah Mosque's area is 2415 sqm, and the structure's dome is 5200 sqm. The maximum height of the structure (dome) is 36.9m, and the mosque's minaret is 56.28m. The mosque has two floors underground for parking, a recreation centre for children, and two museums.

The primary services within this Project consisted in checking, verifying, reviewing the design and making recommendations on all the technical documentation (drawing, structural models, calculations, reports, BoQ, technical specifications) provided by the designer. ICE offered evidence of mistakes and recommendations for solutions to address lack of clarity, miscalculations, non-compliance, omissions, and discrepancies. The verification and review comply with the terms of references, relevant codes and regulations as per standards.

Furthermore, during the construction phase, the following services were provided:

- Construction works supervision
- Inspection and approval of materials
- Surveying of the works and quality control
- Supervision reports
- Project coordination and quantity measure

Photo credits: ©ICE

Project Name: San Pietro Resort, Residence
End date: 01/2020
Client: Concord Investment
Location: Durrës, Albania

Description: The services consist in supervising of Construction works of the "San Pietro Resort" in Lalezi Bay, luxorious resort with 140.000 sqm divided in 24 elite villas, 79 individual villas, 15 attached villas and 660l apartments in 3-story palazzinas. The buildings footprint is less than 51.500 sqn stretching on a beautiful area of 350.000 sqm, with an 1500m of coastline, therefore maintaing a low construction ratio of less than 15%. The resort is desind in conformity with Albanian and European design codes.

The services include detailed design review and supervision services during the construction works, quality, quantity and time schedule control for different type of works like, finish works, structural works, electrical works, mechanical works, road infrastructure and landscaping works.

Photo credits: ©ICE

Project Name: Melia Durrës Hotel, San Pietro Resort
End date: 01/2020
Client: Concord Investment
Location: Durrës, Albania

Description: Nestled in the San Pietro Resort along the Adriatic coast, Melia Durrës is a luxury beachfront resort offering 471 elegant rooms and suites, panoramic seaviews, world-class dining and premium wellness, conference facilities and all 5-star exclusive services. Developed on plot of 82,850 square meters, Meliá Durrës rises on a buildings footprint of no more than 19,339 square meters with an area of 45,214 square meters general construction.

The provided services include:

- Project Management & Consultancy Services
- Detailed design review,
- Providing close supervision of construction activities to ensure compliance with the architectural and engineering project: drawings, specifications book, estimate, cost analysis, technical reports, terms of the construction contract, regulations and laws in force in Albania, and recognized construction best practices.
- Quality, quantity and time schedule control for the structural works.

Photo credit: Edil Al

Project Name: Supervision of Construction Works for “Fior di Bosco” Residential Complex
End date: 02/2022
Client: Concord Investment
Location: Tiranë, Albania

Description: With contemporary and ecological architecture, between a green forest and freshness, the “Fior di Bosco” residential complex is conceived with a distribution of six individual buildings, 10 fllors each, leaving optimal space between them 35-40m, In 28.000sqm of land, over 50% is a green area, free for creative spaces and greenery as well as a park.

The main services provided:

- Providing close supervision of construction activities to ensure compliance with the architectural and engineering project design: drawings, specifications book, BoQ, price analysis, technical reports, terms of the construction contract, regulations and laws in force in Albania, and construction best-known practices;
- Ensuring that the works are carried out following the highest known quality standards, both domestically and internationally. Monitoring the implementation
- Assisting the Client in monitoring the implementation of the construction contract and project management

Photo Credit: Edil Al

Project Name: Supervision of Construction Works for Touristic Village “San Nicolas”
End date: 04/2024
Client: Concord Investment
Location: Palasë, Vlorë, Albania

Description: The tourist and residential residence is located in a unique and elite area of 144.000 sqm, and only 150m from the sea. With a fantastic location and a very beautiful view, “San Nicolas” will offer various services such as commercial premises, a hotel with an area of 15,000 m2, a Service building of 1783 m2, bar-cafe-restaurants, playgrounds for children, sports corners, shared pool, recreational facilities, center sports, private coastline, seaside promenade, etc. “San Nicolas” offers 2 dedicated beaches.

The main services provided:

- Providing close supervision of construction activities to ensure compliance with the architectural and engineering project design: drawings, specifications book, BoQ, price analysis, technical reports, terms of the construction contract, regulations and laws in force in Albania, and construction best-known practices;
- Ensuring that the works are carried out following the highest known quality standards, both domestically and internationally. Monitoring the implementation
- Assisting the Client and Beneficiary in monitoring the implementation of the construction contract and project management

Project Name: Construction Of The Multi-Level Multi-Functional Parking Building At The “Mother Teresa” University Hospital Center Tirana (QSUT)

End date: 01/2020

Client: Albanian Development Fund

Location: Tiranë, Albania

Description: The “Mother Teresa” University Hospital Center Tirana (QSUT) is the most important medical unit in Albania. It operates as a Hospital Center, as a teaching institution, and as a research center. QSUT serves as the primary teaching hospital in the country for the University of Tirana’s Faculty of Medicine and the School of Nursing. It is also the leading institution for tertiary healthcare in the country. It is the largest hospital center in the country, with a capacity of around 1,400 beds, treating over 50,000 patients annually. According to the latest needs of the QSUT patients’ visitors, a 6-foor hotel is to be constructed. Also another critical part of the project is the construction of a 6-floor open parking adjacent to the hotel.

The provided services include:

- Detailed structural design
- Deetailed design of the connecting infrastructure
- Detailed electrical design
- Detailed hydro-mechanical design
- Dire protection systems design
- Topography studies

Photo credits: ©ICE

Project Name: Interventions to improve the environment and the urban landscape of the areas through interventions that evoke the tradition and authenticity of the areas of 100 villages."

End date: 12/2022

Client: MetroPOLIS

Location: Tiranë, Albania

Description: The 100 villages program aims to coordinate the development interventions in the rural area of 100 villages according to the cross-sectoral approach and with more actors, breaking away from the fragmented interventions and with strict sectoral approaches that are happening or expected to happen in the country. The integrated approach for rural development will target measurable objectives for the development of the rural space through the centralized focus of public investments, those of donors and private investments, in the well-defined space of 100 villages with high potentials for economic-social development, agritourism yesterday to natural tourism, nature and environment as well as cultural heritage.The project is divided into 4 lots and this lot in particular covers the villages of Lëpushë-Vermosh, Shishtavec, Curraj i Epërm, Fushë Studen -Stëblevë, Radomirë, Hekal-Klos, Kuc, Rehovë, Seferan, Sotirë, Sutaj, Qytezë-Arrëz-Sinicë, Leusë, Pllocë-Vajzë, Tragjas, providing:

Urban rehabilitation of centers and auxiliary services around it; Rehabilitation of the main squares of the villages and

restoration of the façades on the main roads according to traditional construction techniques; Integration of recreational parks; The establishment of agro-processing spots for agricultural livestock products or medicinal plants; Improvement of road traffic and traffic disciplination to create public spaces; Rehabilitation and restoration of traditional buildings around the centers of villages; Creation of information points for tourists, including providing a guide, advertising attractions, etc.; Construction and rehabilitation of internal roads in villages; Reconstruction of health centers and construction of cultural centers; Rehabilitation and use of water mills as a tourist attraction; Improvement of the waste service, as well as the implementation of the composting technique for organic waste; Rehabilitation of electricity receiving units as well as the telephony network; Construction of the sewerage and drinking water network in order to preserve natural resources as tourist assets.

The main services provided within this Project were as below:

- Architectural Design
- Structural Design
- HVAC Design
- Electrical and IT Design
- Topography studies
- Geological investigations.

Photo credits: ©ICE

Project Name: Arif Halil Sulaj High School
End date: 04/2020
Client: Albanian Development Fund
Location: Mamurras, Albania

Description: Located near the centre of Mamurras, Kurbin, the building of the new 468-student capacity school "Arif Halil Sulaj", contains a gross floor area of 3'314m² raised on 4 floors above ground and 1 floor underground. The project consists of the design and reconstruction of the school due to irreparable damage caused by the earthquake of November, 2019.
The design service has comprised the realisation of the project implementation and had included the following:

- Realization of the following projects: (1) topographical survey; (2) architecture; (3) constructive; (4) electrical; (5) hydrosanitary; (6) the water pipeline and hydrants; (7) the energy efficiency; (8) mechanical and fire protection; (9) landscape and external systems around the facility.
- Realize all the necessary drawings at the "shop drawing" level, such as plans, longitudinal and transverse profiles, type details, etc., and preparation of technical specifications and reports.
- Preparation of the final table of volumes and estimation of the final work.

Photo credits: ©ICE

Project Name: Dan Bajrami Elementary School
End date: 04/2020
Client: Albanian Development Fund
Location: Gjorem, Mamurras, Albania

Description: . Conceived in the wake of the devastating November 2019 earthquake, this new facility replaces the damaged structure with a modern, purpose-built educational campus that will welcome 440 strudents. Set on overs 8.000 m² of land, with a built-up area of 3.256 m², the design embraces both functionality and commuity integration.The school comprises:

- 15 spacious classrooms
- 4 modern laboratories
- A fully equipped gymnasium
- Two outdoo sport fields
- A dedicated preschool area for up to 80 children.

The primary services provided within this Project were as follows:

- Preparation of Conceptual, Detailed Design, including Technical Specifications;
- Feasibility Study of Efficiency Energy;
- Assistance with the preparation of Procurement Tendering and Contract Implementation;
- Environmental Social Due Diligence; and,
- Preparation of ESIA (Environment and Social Impact Assessment) for the project

Photo credits: ©ICE

Project Name: Tirana Industrial Park (TIP)
End date: 08/2019
Client: Concord Investment
Location: Tirana, Albania

Description: Strategically located 11km from Tirana, the Tirana Industrial Park (TIP), is an ambitious project combining the logistic park concept with the business administration forming an Industrial Park". Spanning 136.000sqm, the park will 44 warehouse units ranging 700-3200sqm and showroom units ranging 400-600sqm.

The services consist in supervising the construction works in prefabricated concrete structures of 8 warehouses (first phase) included the Tirana Industrial Park

The services include detailed design review, quality, quantity and time schedule control for finish works, structural works and road infrastructure.

Photo credit: Concord Investment

Project Name: La Dimora Complex
End date: 12/2024
Client: Reportage Properties
Location: Durrës, Albania

Description: The “La Dimora” complex is located on the Adriatic seaside, in the Bay of Shën Pjetri, Municipality of Durrës, and has a total gross floor area of 14’861 m², built-up on 3 floors above ground.

The complex - in accordance with the Client’s request - consists of 80 row single-family holiday homes with an average GFA per unit of 180 m2 each, a commercial and services building, recreational and administrative areas. Each house on the ground floor contains a living room, cooking and dining area, while on the outside there is a front yard with the pertinent car port while the rear yard is a private garden; on the two upper floors there are respectively two double bedrooms, each equipped with its own bathroom.

The complex is designed to encourage the use during all four seasons of the year, not just during the warm season.

Plot area: 12’060 m²
Residential GFA: 13’986 m²
Commercial GFA (services & administration): 537 m²
Green area & public spaces: 34.3%

Photo credits: ©ICE

Project Name: MELOGRANO Residences
End date: 02/2020
Client:
Location: Tirana, Albania

Description: The project consists in the designing of the project idea for a new residential area near Tirana City including individual villas, recreational areas and engineering infrastructure.

Photo credits: ©ICE

Project Name: Beder University Main Building
End date: 08/2018
Client: Beder University
Location: Tirana, Albania

Description: The services consist in design and supervision of 13000 square meters main university building including parking areas, conference room, auditoriums, classes and laboratories, offices, recreational areas and praying room. The services include detailed design review, quality and time schedule control for different type of works like, finishing and architectural, structural, electrical, mechanical and landscaping.

Photo credits: ©ICE

Project Name: Sport Center
End date: 12/2017
Client: Comelite
Location: Kingdom of Saudi

Description: The project is about designing of a new sport center dedicated to women in Kingdom of Saudi Arabia including reception, swimming pool, exercising saloon, recreational area and food courts. The project consists in structural design analysis and the detailed design drawings of a 3 story over-ground commercial building with an average area per floor of 1030 sqm, in total approx. 3090 sqm. The structural system proposed for this building is reinforced concrete dual frame-shear wall system with vertical elements spanning from each other up to 15 m.

The services include structural detailed design, calculations, reports and drawings.

Photo credits: Comelite Architecture

Photo credits: ©ICE

HYDROPOWER

HYDROPOWER

These days, the need for clean energy is ever-growing, and producing clean energy through the greater and more efficient use of hydropower is a socio-political necessity and duty.

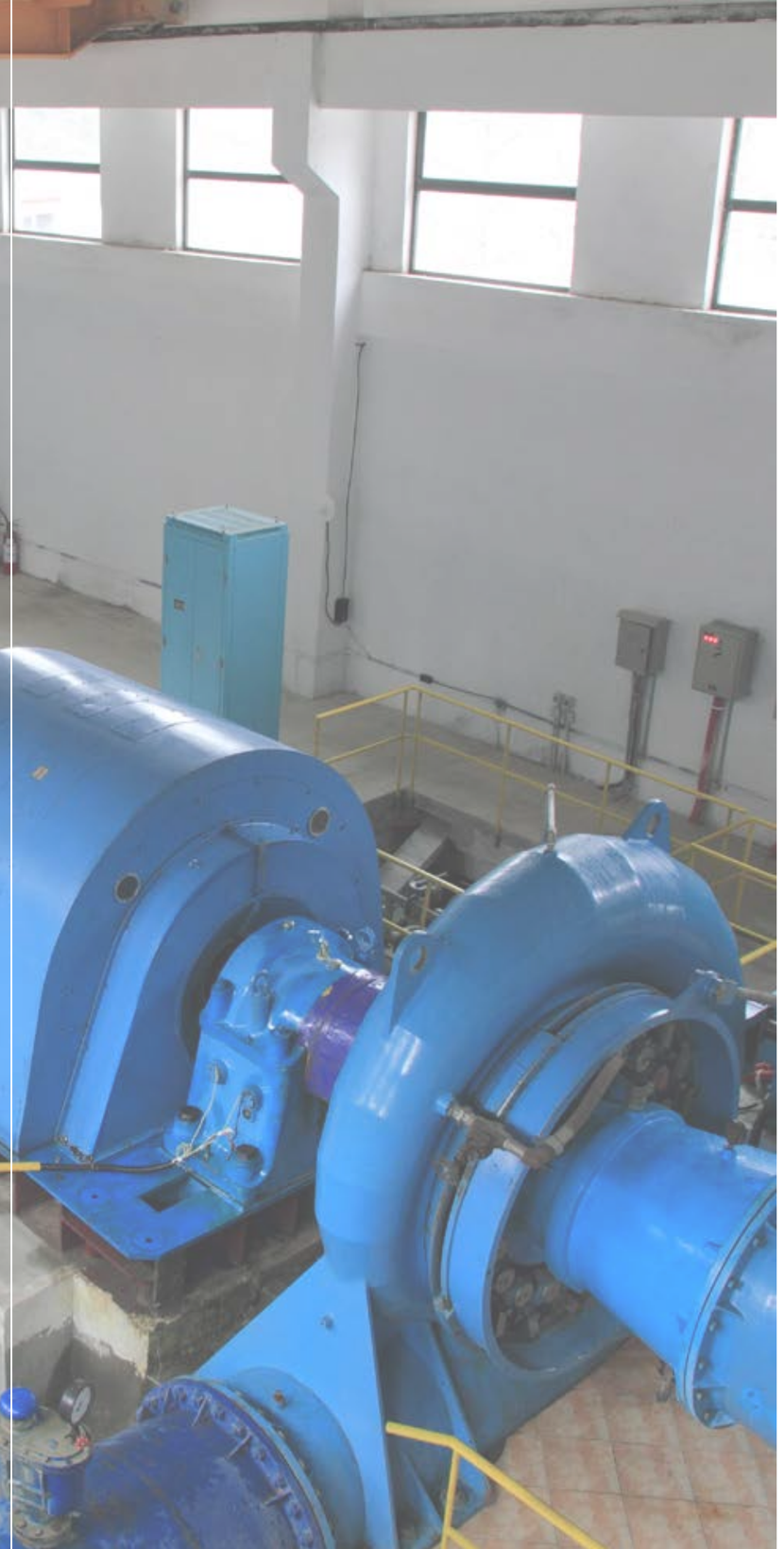
Within the field of Hydropower, we provide planning, design, and construction management of hydroelectric power and multi-purpose projects, including studies to enhance optimum compatibility with the environment, to satisfy the increasing demand for security of supply.

- Hydropower Plant
- Dams & Reservoirs
- Mechanical & Electrical
- Hydraulic Structures

The increasing complexity of our work demands perpetual innovation and adaptability.

We use the most modern tools and methods for static and dynamic investigations of hydraulic systems, mathematical modeling of the foundations and superstructures, static and dynamic calculations of constructions as well as for transient calculations.

Our experience encompasses a wide range of conventional plants, from the mountains type comprising long tunnels and hundreds of meters head, very low run-of-river schemes developing few meters head, both with weirs and dams.



Clients can as well, rely on our expert services in dam design, based on our vast experience. Many existing power plants, irrigation dams are constructed decades ago and they need rehabilitation and upgrading, given the increasing energy shortages and safety.

For an economical continuous operation of these plants, we provide to our clients complete renewal concepts and investment planning, dam rehabilitation, renovation of penstocks, optimization of turbines, and electromechanical equipment.

Photo credits: ©ICE

Project Name: Design and Supervision Services for 24.3MW Dragobia HPP
End date: 2018
Client: Dragobia Energy shpk
Location: Bajram Curri,Albania

Description: The project is divided in two phases. Phase one consists in reviewing the existing design and improving and detailing the necessary documents/drawings. Phase two consists in the supervision of the construction works. The project comprises two HPPs: Dragobia HPP and Ceremi HPP.

Dragobia HPP is located at Valbona river and has an installed power of 14.2MW. The intake structure is installed at 671m a.s.l. and designed for the rated flow of 12m³/s and max. flow of 380m³/s . The conveyance system comprises a 2.5km long free flow tunnel and 750m buried steel penstock with diameter 2000mm. The penstock is designed for rated pressure 15bar and full vacuum. The powerhouse is located at 683m a.s.l. where three Francis turbines are installed.

Ceremi HPP is located at Ceremi stream and has an installed power of 9.1MW. The intake structure will be installed at 1024m a.s.l. and is designed for the rated flow of 3m³/s and max. flow of 130m³/s.The conveyance system comprises a 1.6km long free flow tunnel and 1.5km buried steel penstock with diameter 1000mm. The penstock is designed for rated pressure43bar.Thepowerhouse is located at 535m a.s.l. where two Pelton turbines are installed.

The main services provided:

- Design review and detailed design for all the structures, including water intakes, desanding chambers, forebays, tunnels, penstock, powerhouses, tailraces.
- Supervision of the construction work
- Supervision of the electrical works.
- Inspection and approval of materials.
- Surveying of the works and quantity measures.
- Project coordination and quantity measures.

Photo credits: ©ICE

Project Name: Detailed design and Supervision of 12MW Tervoli HPP

End date: 2010

Client: BLE-KLO-AR sh.p.k

Location: Gramsh, Albania

Description: The Tervoli HPP is a run-of-river type hydropower plant located in Gramsh, Albania and has an installed capacity of 12MW, rated flow 8m³/s, gross head 200m and estimated energy production of approximately 40,000 MWh/year.

It comprises the following main structures:

- Water Intake located at 442m a.s.l.
- 2.8km Derivation Tunnel with dimensions 2.5x2.75m
- Forebay located at 435m a.s.l.
- 400m Steel Penstock with a diameter of 1600mm and head of 200m
- Powerhouse located at 235m a.s.l. where two Francis and one Pelton turbines were installed
- OH Power Transmission Line 7.3km long.

The main services provided within this Project were the Detailed Design and Supervision of all structures and works, including:

- Design Services
- Topographical Survey
- Geotechnical Investigation

- Hydraulic design of all water structures, including Water Intake, Tunnel, Forebay, Penstock and Tailrace
- Structural design of all structures, including Water Intake, Tunnel, Forebay, Penstock, Powerhouse Tailrace and OH Power Transmission Line
- Mechanical of all components, including Hydraulic Gates, Trashracks and Penstock
- Electrical Design, including Power Supply, Lightning Protection and Lighting
- Design of River Protection structures
- Preparation of BoQ and technical specifications.

Supervision Services:

- Daily Supervision of all the Civil and Electro-Mechanical works
- Quality and quantity control
- Monitoring the progress of contractors and sub/contractors
- Design services for on-site adjustments
- Land Acquisition plans and identification of cadastral functionality classes
- Consultancies during the Operation and Maintenance phase.

Photo credits: ©ICE

Project Name: Detailed Design of 8.3MW Ternova HPP
End date: 2012
Client: Teodori 2003 sh.p.k.
Location: Dibër, Albania

Description: The Ternova HPP is the biggest HPP in Albania and one of the biggest in Balcan in terms of water head. Located in Bulqize, it is a storage hydropower and has an installed power of 8.3MW, a head of 1000m and an estimated annual energy production of approximately of 43,000MWh.

Its main components are as follows:

- 23km Derivation Channels;
- 3 Derivation Tunnels with a total length of 1.5km;
- 3 Lakes with a total water volume of 3.8 million m³
- Earth Dam of 10m height
- Intake structure located at 1646m a.s.l.
- Penstock 5km long and 1000m head composed of three sections: GRP, Ductile Iron and Steel Pipe
- Powerhouse located at 646m a.s.l. where one Pelton turbine was installed
- 110kV OH Power Transmission Line 1.4km long
- 13km Upstream Power Line 10kV.

The main services provided for this Project were the following:

- Topographical Survey
- Geotechnical investigation
- Hydraulic design of water structures
- Design of derivation channels, tunnels, pipelines
- Design of underground and aboveground penstock, including anchor blocks and saddles
- Design of the earth dam
- Design of the powerhouse
- Design of the Power Line
- Preparation of BoQ and technical specifications
- Land Acquisition plans

Photo credits: ©ICE

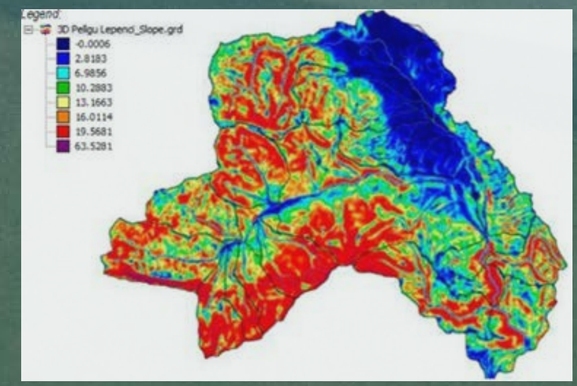
Project Name: Bankable Feasibility Study of HPP Lepenci 1&3, 18 MW
End date: 2012
Client: EUROKOS.
Location: Kosovo

Description: The Project consists of a feasibility study of the Lepenci river Cascade located in Kacanik comprising two hydropower plants, Lepenci 1 and Lepenci 3.

Lepenci 1 has an installed power of 9.8 MW and annual estimated energy production of 39.9 million kWh. The gross head is 80 m and the rated flow is 15.0 m3/s. The components handled technically by ICE are water intake, desanding chamber, forebay, three tunnels with a total length of approximately 6.5km, surge tank, penstock 290m long with 2400mm diameter, powerhouse, tailrace, substation, transmission line, energy model, and temporary works such as access roads.

Lepenci 3 has an installed power of 10 MW and annual estimated energy production of 38.3 million kWh. The gross head is 138.6 m and the rated flow is 9.0 m3/s. The components handled technically by ICE are water intake, desanding chamber, forebay, conveyance system made of 7.8 km GRP pipe with 2100mm and 2200mm dia and a short tunnel 110 m, powerhouse, tailrace, substation, transmission line, energy model, and temporary works such as access roads.

Photo credits: ©ICE



Project Name: KESH Restructuring – Climate Risk Management Plan
End date: 2019
Client: Pöyry Austria GmbH
Location: Tirana, Albania

Description: Pöyry Energy GmbH was awarded a contract for providing consulting services for the assignment "Albania KESH Restructuring – Climate Risk Management" by the European Bank for Reconstruction and Development (EBRD). The Project aims at building capacity in climate-resilient hydropower operation within Korporata Elektroenergjitike Shqiptare (KESH), which operates the Drin River Cascade in Albania.

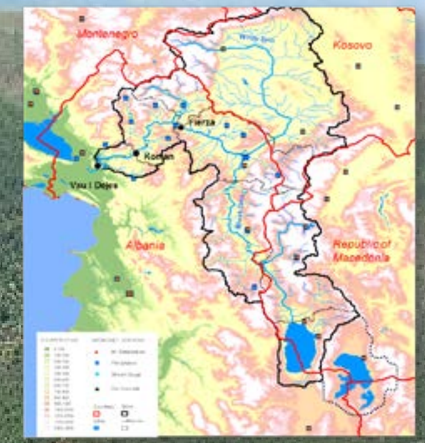
The Project included the following five main components:

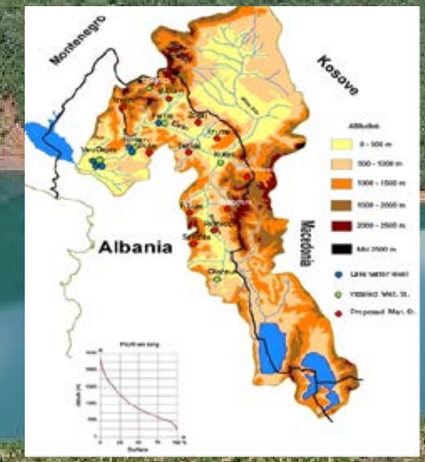
Task 1: Scoping phase
Task 2: Twinning and exchange program with a leading hydropower operator
Task 3: Capacity building and technical skills transfer
Task 4: Sector outreach process for improved stakeholder collaboration
Task 5: Development of a draft Climate Risk Management Plan

The main services provided:

- Assessment of hydrology baseline, water management on Drini river basin, and transboundary issues
- Collection and assessment of hydrological data.
- Assessment of water flows and determination of meteorological station positjon
- Preparation of workshops and supporting the training courses.

Photo credits: ©ICE





Project Name: Supervision of works for intervention and maintenance of CO2 systems in HPP Fierze and HPP Koman

End date: 2022

Client: KESH sh.a.

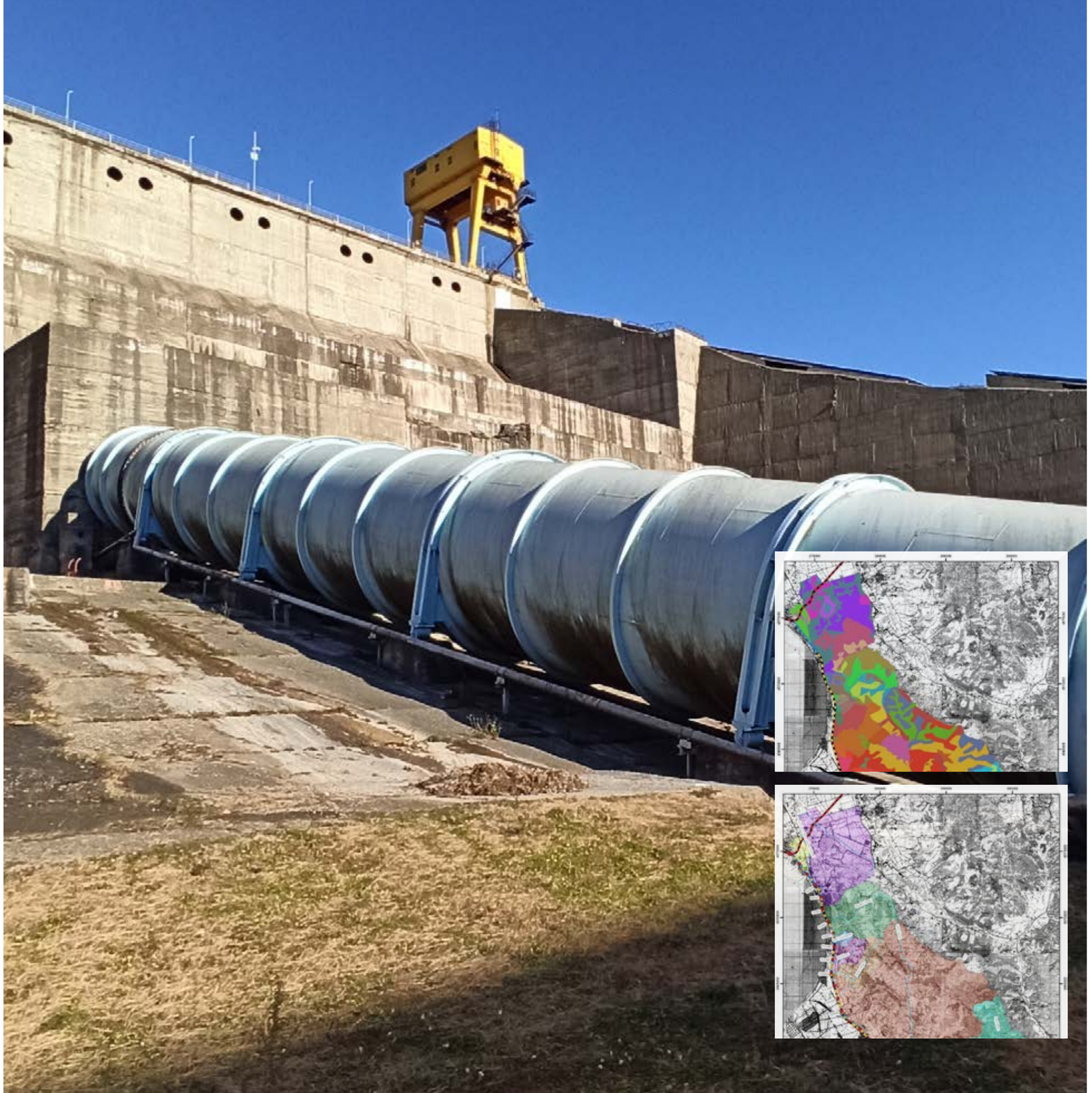
Location: Koman, Albania

Description: HEC Koman has planned the investment for the object: “Supply, assembly of metal pipes for removal from the CO2 throttle room of the fire-fighting systems of 4 aggregates in HEC Koman”, with the aim of increasing technical and safety conditions at work, as an implementation to the approved investment plan for 2021.

Installation of the necessary pipes and accessories for the removal of CO2 gases and combustion gases, after extinguishing the fire from the fire-fighting system with CO2 gas cylinders in the rooms of the generators of four aggregates and ensuring normal working conditions in the room of machines.

The purpose of the project

- Removal of CO2 gases and combustion gases from the generator rooms of four aggregates to the outside environment.
- The creation of normal working conditions in the machine room after extinguishing the fire in the generator by the firefighting system with CO2 gas cylinders at four aggregates in HEC Koman.



- Protecting the health of employees and ensuring normal working conditions in the machine room.

The contract for the supervision of the facility “Removal of CO2 gas from the generator room for the system of fire protection in HEC FIERZE and KOMAN” owned by KESH sha and investor “KESH” sha, was awarded to Illyrian Consulting Engineers (ICE) sh.p.k.

Photo credits: ©ICE

OIL & GAS

Project Name: Trans Adriatic Pipeline
Photo Credits: TAP Albania

OIL & GAS

The oil and gas industry brings a distinctive set of challenges for owners and operators. As reserves diminish and product demand fluctuates, the efficiency, accuracy, and reliability of support services become more critical than ever.

With more than 5 years of experience in the oil and gas industry, we pride ourselves on the quality of our services and operate to strict quality and health and safety standards.

We have provided services to some of the largest leading oil and gas companies.

Within the field of Oil & Gas, ICE offers onshore and offshore design and supervision services in the downstream sector.

At ICE, we have built up our repute by heeding and fathoming the challenges our clients face day-to-day. What we offer is a large spectrum of project solutions, developed both locally and overseas.

We maintain our commitment to our clients throughout our wide range of services, including strategic consulting, technical leadership, program and project management, planning, multidisciplinary engineering and design, construction management, environmental, and operational support to solve client issues, irrespective of size or complexity, optimizing operations and processes, and enhancing the value of assets.

Photo Credits: TAP Albania

Project Name: Engineering Services from Local Licensed Engineer for Trans Adriatic Pipeline and 9 BVS
End date: 02/2016
Client:
Location: Albania

Description: The Trans Adriatic Pipeline (TAP) has a key role to play in securing the long-term diversity and security of Europe's energy supply. This pipeline will connect Western and South-Eastern Europe to the abundant new gas sources in the Caspian basin and beyond. It will create new opportunities in the Southern Gas Corridor and across Europe, and will be vital in meeting the region's ever-growing energy demands in a cost-effective and sustainable way.
Project consists in the preparation and the introduction of the infrastructure/building permit application documents related to the TAP Pipeline of 211 km and 9 BVS stations in Albania. The scope of work cover all required TAP Pipeline of 211 km and 9 BVS of the onshore pipeline part in Albania and the TAP Pipeline of 211 km and 9 BVS related infrastructures.

The main services provided:
- Design review of studies, reports, drawings as per Albanian legislation
- Preparatin and organization of some infrastructure / building permit application documents
- Translation
- Verification
- Fire safety protection concept

Photo Credits: TAP Albania

Project Name: Engineering Services from Local Licensed Engineer for TAP Metering Station ACS02
End date: 12/2015
Client: Trans Adriatic Pipeline AG
Location: Bilisht,Albania

Description: The Trans Adriatic Pipeline (TAP) has a key role to play in securing the long-term diversity and security of Europe's energy supply. The project consists in the preparation and the introduction of the infrastructure/building permit application documents related to the TAP Metering Station ACS02 in Bilisht, Albania with an approximate area of 8.4 ha. The scope of work cover all required Metering Station ACS02 in Bilisht Site of the onshore pipeline part in Albania and the Metering Station ACS02 related infrastructures.

The main services provided:

- Design review of studies, reports, drawings as per Albanian legislation
- Preparation and organization of some infrastructure / building permit application documents
- Translation
- Verification
- Fire safety protection concept

Photo Credits: TAP Albania

Project Name: Supervision Services for TAP Pipe Yards and Camp Sites Construction and Pipe Erection for Section 4B
End date: 03/2017
Client: Trans Adriatic Pipeline AG
Location: Albania

Description: The project consists of the supervision of the construction of TAP Pipe Yards and Camp Sites in Albania and also the gas pipelie erection for section 4b. Eight pipe yards and six campsites have been identified for the permitting process. Pipe yards and construction camps will be developed before the construction of the pipeline and associated facilities begins. The Pipe Yards areas vary from 24'000m2 to 95'000 m2 with a storage capacity of a total of 11700 pieces. The Camp Sites areas vary from 16'000m2 to 75'000m2 with capacities of 100 and 200 people, in total of 1100 people. The scope of work cover all required Pipe Yards and Camp Sites of the onshore pipeline part in Albania and the related infrastructures. The main services provided:

- Supervision services.
- Monitoring on site the construction activities for campyards and pipeyards.
- Monitoring on site the construction activities for pipe erection for section 4b.
- Inspection and approval of materials.
- Surveying of the works and quantity measures.
- Project coordination and quantity measures.

Photo Credits: TAP Albania

Project Name: : Detailed Structural Design of Nigeria LNG - Bonny Buildings and Structural Calculation

End date: 2021

Client: OneWorks S.p.A.

Location: Nigeria

Description: The Nigeria LNG Train 7 project is a significant expansion of the existing liquefied natural gas facility located on Bonny Island, Rivers State, Nigeria. The Train 7 project is the biggest project that will unlock Nigeria Gas potentials, expected to ramp up NLNG's production capacity by 35%, from 22 mtpa to 30 mtpa.

Our role encompassed the structural design of a variety of critical onshore facilities including:

- Administrative and technical buildings
- Accomodation facilities for up to 7500 personnel
- Utility and support structures
- Maintenance and workshop buildings

The main services provided:

- Structural design of buildings using American standards in petrochemical area
- Blast design of two buildings

Photo credits: SAIPEM

Photo credits: ©ICE

GEOTECHNICS & UNDERGROUND STRUCTURES

GEOTECHNICS & UNDERGROUND STRUCTURES

The underground is often thought of as a “black box,” full of risk and uncertainty.

Through expert analysis, design, and discussion with our clients, we reduce the unknowns and get projects out of the ground on time and within the budget.

Every site poses a unique mix of challenges, such as tight space, neighboring buildings, contamination, complex regulations, community concerns, and more.

We have the extensive know-how and ample experience to offer designs solutions that address these unique challenges.

The Geotechnics and Underground Structures department has been an integral part of the company since its foundation.

ICE provides geotechnical engineering consulting for many construction projects including power, commercial, institutional and industrial buildings, and other structures; dams, levees, and pipelines; tunnels, highways and bridges, and construction-related structures such as slurry walls and excavation support systems.

ICE offers collaboration in the field of consultancy, supervision, selection of contractors, elaboration of design documents of all stages including its discussion, author supervision, engineering supervision of the works, etc. Some of the services that we provide for the Geotechnics & Underground Structures can be listed as follows:

- Geotechnical and geophysical investigations
- Tunnels
- Investigation of power plants and dams
- Hydrogeological investigations
- Design of foundation and underpinning
- Design of ground improvement
- Stability calculation of slopes earth-fill dams
- Design of sheet piles and geostructures.

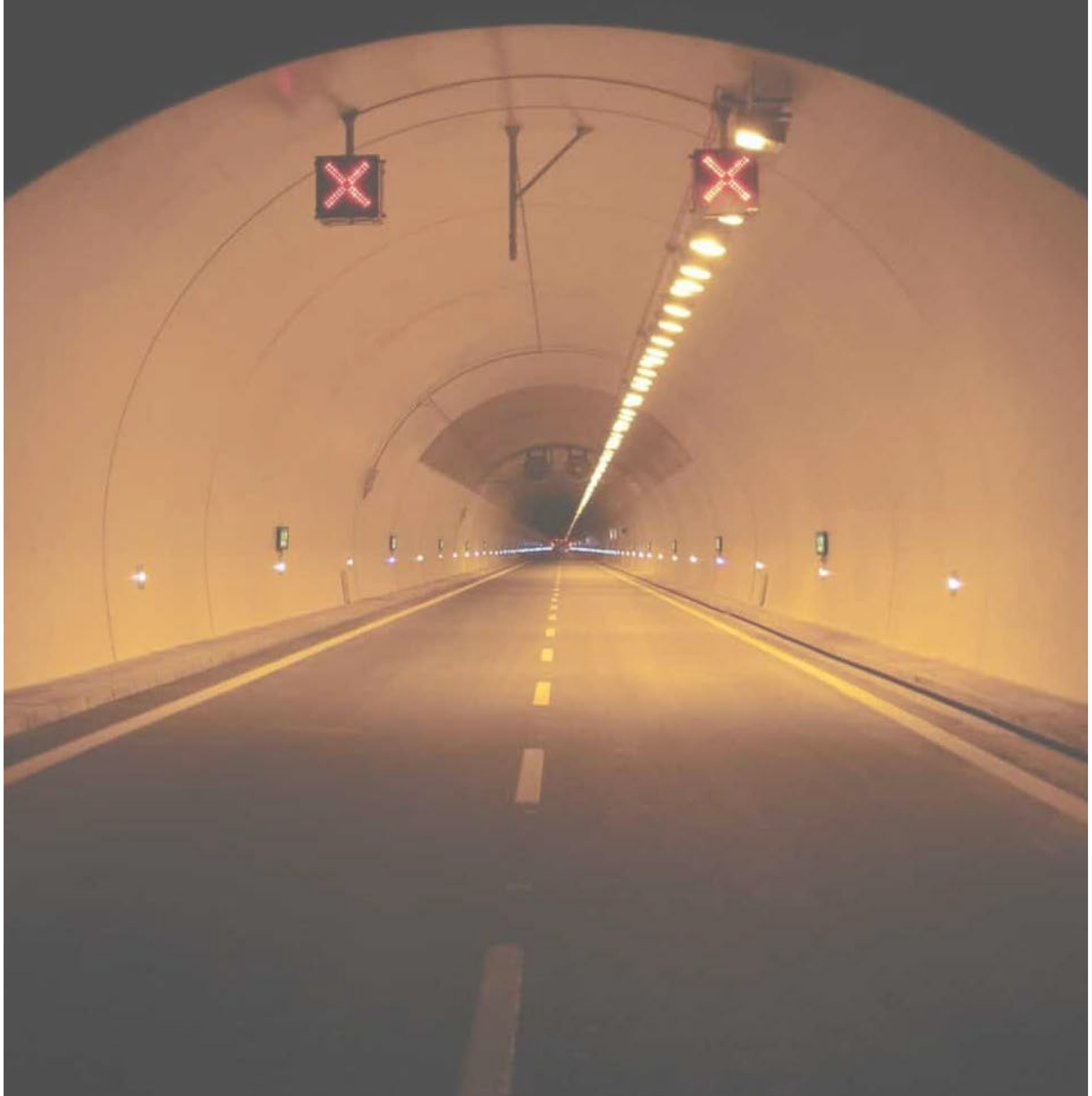


Photo credits: ENKA

Project Name: Supervision of the Construction Works of the Thirra Tunnel (Rreshen - Kalimash Motorway

End date: 12/2009

Client: General Roads Directorate of Albania

Location: Albania

Description: The Thirra Tunnel is a key element of the 61 km Rrëshen–Kalimash motorway, part of the Durrës–Morinë corridor connecting Albania's Adriatic port with Kosovo. The tunnel comprises two parallel tubes, each 5.5 km in length, passing through Mount Runes at an elevation of 1,858 meters. Each tube has an excavation width and height of 11.5 m and 8.8 m, respectively and a cross-sectional area of approximately 80 m² Constructed using the New Austrian Tunneling Method (NATM) with drill-and-blast techniques, excavation began in May 2007 from all four portals simultaneously. Five Atlas Copco jumbos were deployed and immediate ground support was provided through systematic installation of rock bolts, shotcrete, and lattice girders.

The main services provided:

- Project Management and Coordination
- Quality Control and Assurance
- Progress Monitoring and Reporting
- HSE Supervision
- Contract Administration
- Technical Supervision
- Geotechnical and Structural Monitoring
- Testing and Commissioning
- Documentation and As-Built Records

Photo credits: ©ICE

Project Name: Design and Supervision Services for Dragobia and Ceremi HPPs' Derivation Tunnels

End date: 2018

Client: Dragobia Energy shpk

Location: Bajram Curri,Albania

Description: The Dragobia HPP Project comprises two run-of-river hydropower, Dragobia HPP and Ceremi HPP. They have derivation tunnels, which are part of the water conveyance system. They are approximately 2.5 km long each and 5 km in total. The cross-sectional width and height of the Dragobia HPP tunnel and Ceremi HPP tunnel are 2.8x3.1 m and 2.5x2.8 m, respectively. The tunnels have a minimum longitudinal slope of 0.1% and a maximum slope 13%. It passes through a limestone rock formation with different rock classes.
The tunnel excavation is carried out using drill and blast method. Temporary and permanent support were applied, including rock anchors, shotcrete, steel arches and reinforced concrete. Loose materials were observed for the first segments of the tunnels, where special measures were applied for the temporary and permanent supports.

The main services provided:

- Geometrical design of tunnels, including horizontal and vertical alignment
- Geotechnical and structural design for different rock classes
- Ventilation design
- Works supervision and project management

Photo credits: ©ICE

Project Name: Design and Supervision Services for Tervoli HPP Derivation Tunnel
End date: 2018
Client: Dragobia Energy shpk
Location: Bajram Curri,Albania

Description: The derivation tunnel of Tervoli HPP is part of the water conveyance system. It is approximately 2.81 km long and has a cross-sectional area of 2.5 and 2.7 m. The tunnel has a longitudinal slope of 0.2%. It passes through a limestone rock formation where some karst caverns are observed.

The tunnel excavation was carried out using drill and blast method. Temporary and permanent support were applied, including rock anchors, shotcrete, steel arches and reinforced concrete.

The main services provided:

- Geometrical design of the tunnel, including horizontal and vertical alignment
- Geotechnical and structural design
- Ventilation design
- Works supervision and project management

Photo credits: ©ICE

PHOTOVOLTAICS

PHOTOVOLTAICS

ICE is pioneering solar energy in Albania and is dedicated to promoting solar power in both commercial and residential applications.

ICE supports the industry's leading developers, lenders, and constructors, and provides expertise in solar energy engineering and technical advisory services.

We help clients meet challenges in planning and executing high-performance solar energy projects.

ICE offers expertise in solar energy engineering design, technical advisory, and project delivery services to support manufacturers, developers, contractors, utility companies, owners, investors/lenders, and governments in meeting the challenges faced in planning and executing solar projects.

These can include accurately assessing energy yield, and developing electrical, civil/structural and control system engineering design and specifications, all the way through to performing strategic investigations on solar energy investments, managing the tendering process, managing, and monitoring construction and commissioning of solar power plants, as well as monitoring performance and maintenance during the operational phase, and more.

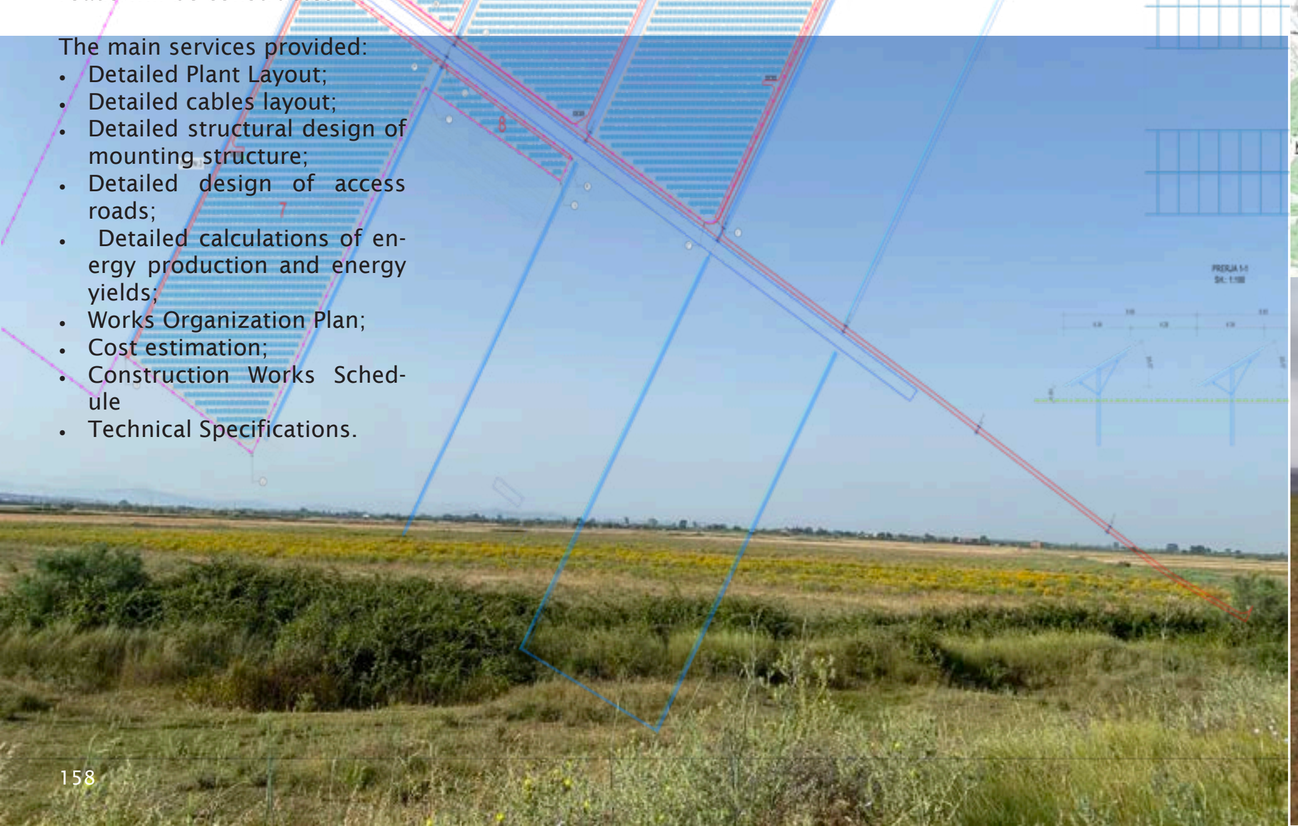
We specialize in energy concepts and design that meet the increasing demand for reliable, efficient, and sustainable energy solutions. Within the field of Solar Energy, we provide Technical and Economic Feasibility Studies, Energy Yield and Resource Analysis, Environmental and Social Impact Assessment, Grid Connection, and Technical Design.

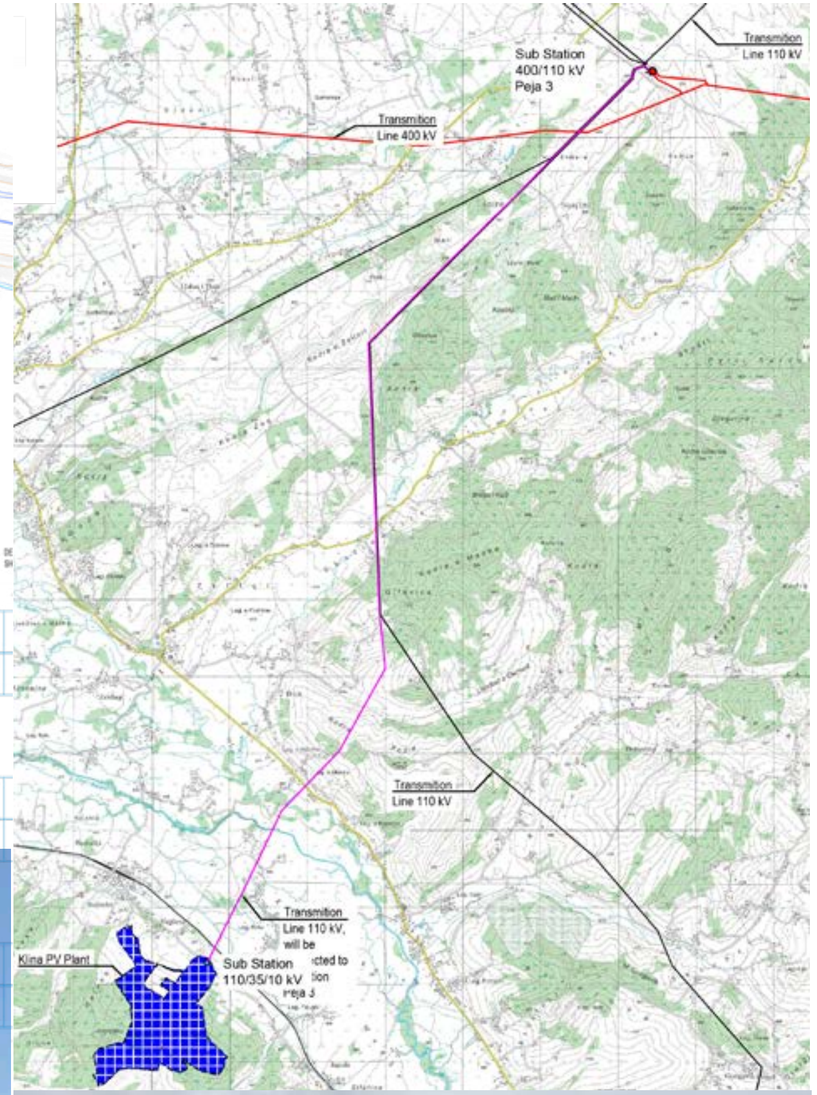
Project Name: AlbSolar-1
End date: 2022
Client: AlbSolar-1shpk
Location: Fier, Albania

Description: The Photovoltaic Park AlbSolar 1 is a Solar Power Plant that will convert sunlight into elctrical energy. The installedpower is 50MW AC. It will be connected with directly to the transmision system. The plant is locatedin Libofshe 15 km away from Fier municipality. The total ocupied area where the photovoltaic pannels and the main inverters will be installed is 46.1ha. The net area ocupied area is 21.85ha or 47.4% of the total area. Fixed pannels will be used with an angle of 25 degrees to the horizont. The total area will be fenced and access roads will be constructed.

The main services provided:

- Detailed Plant Layout;
- Detailed cables layout;
- Detailed structural design of mounting structure;
- Detailed design of access roads;
- Detailed calculations of energy production and energy yields;
- Works Organization Plan;
- Cost estimation;
- Construction Works Schedule
- Technical Specifications.





Project Name: Feasibility Study for the 100MW Klina PV
End date: 2022
Client: Power Voyage & Bini-X
Location: Klinë, Kosovo

Description: Klina Photovoltaic (PV) Power Plant has a total installed capacity 100 MWp (DC). It uses solar renewable energy source to produce and generate electricity. The solar irradiation is transformed by photovoltaic modules into electrical energy which will then be injected on the public grid. The purpose of this study is to assess the site and climate conditions, energy production and to estimate the project cost. The main objective is to highlight the potential capacity of the 160ha project area in terms of solar energy and to estimate its benefit from the financial, environmental and social point of view.

The main services provided:

- Project layout;
- Preliminary project site and environmental investigation and assessment;
- Estimation of energy production and energy yields;
- Grid connection and transmission line;
- Cost estimation
- Business plan and
- Financial analysis.

Photo credits: ©ICE

Project Name: Hydrological, Drainage, Flooding, Geotechnical, Topographical and Cadastral Study for the 100MW Photovoltaic Plant in Spitallë

End date: 10/2022

Client: Voltalia Albania sh.p.k.

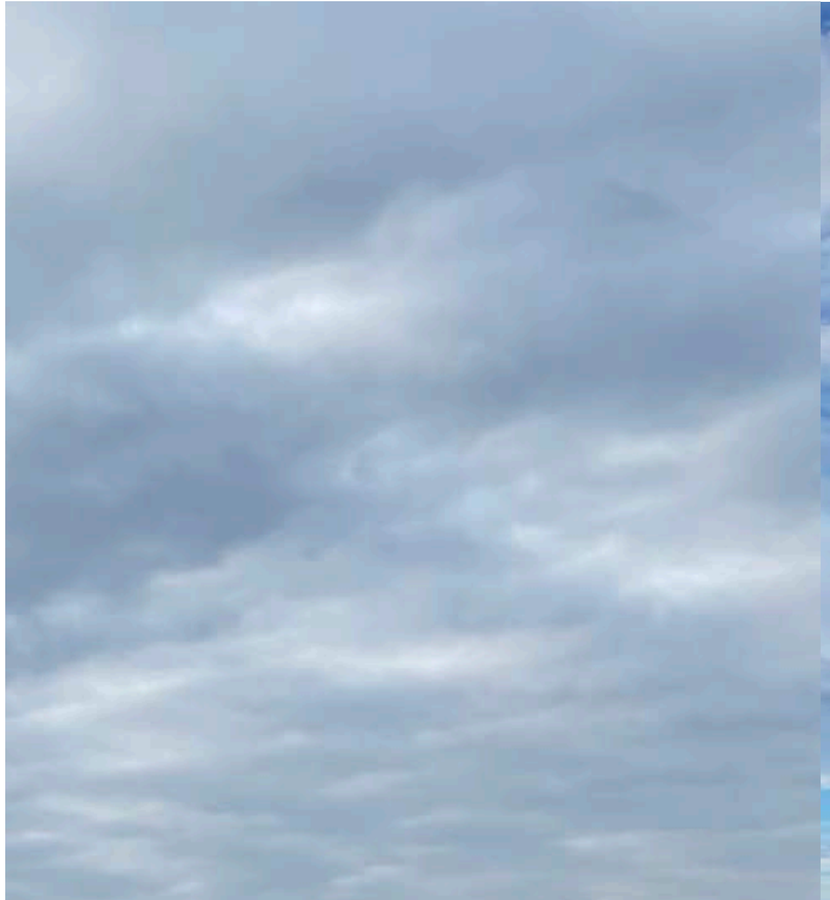
Location: Durrës, Albania

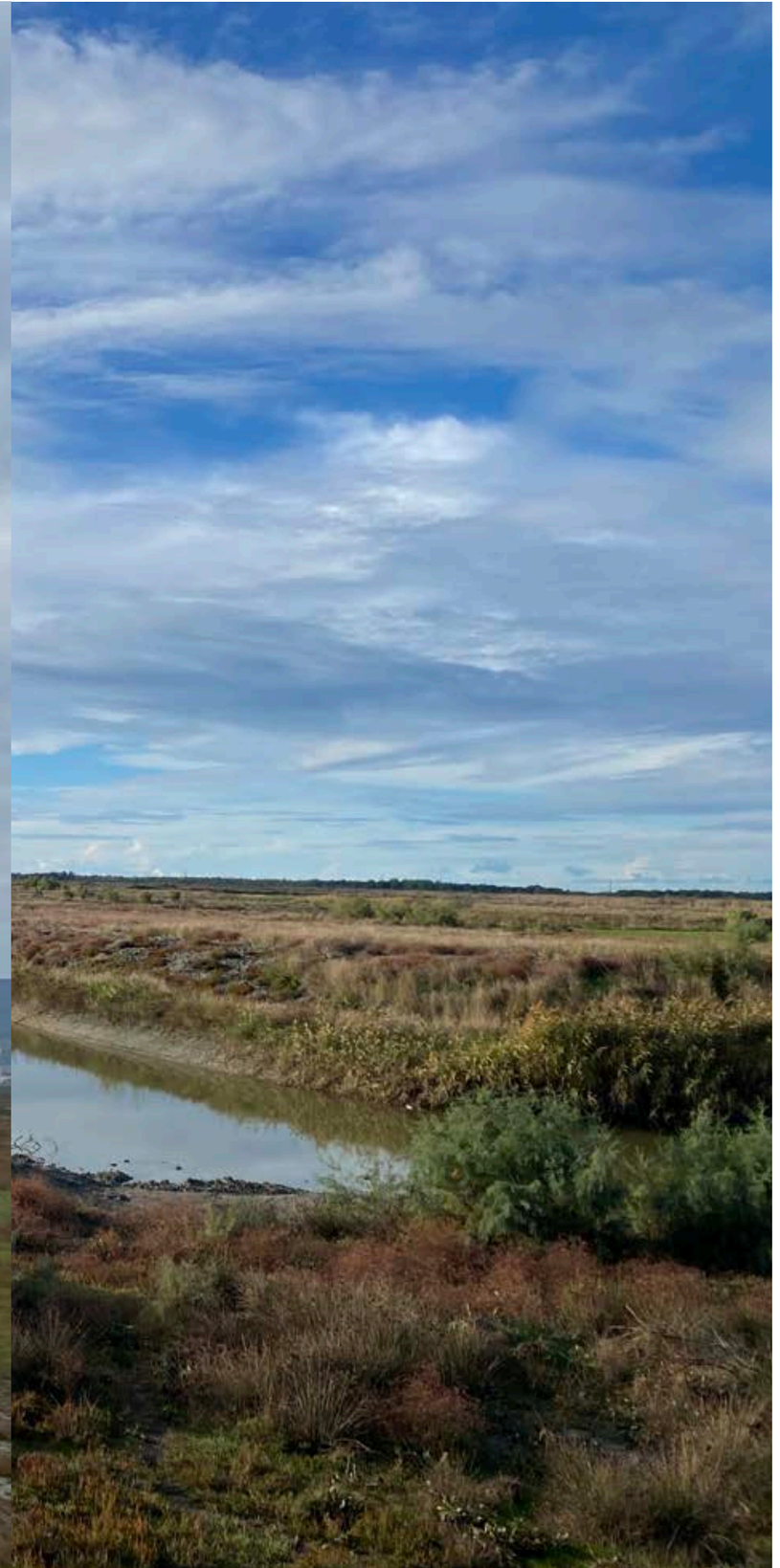
Description: Spitalle PV Power Plant has an installed capacity 100 MWp. It is located in Durres region Albania with a study area of about 150 ha. The aim is to develop a preliminary hydraulic model for the watershed area where the "SPITALLE" 100 MW photovoltaic plant will be constructed. The main objective of this project is to provide a description of the area, climate, watershed characteristics, and flood maps for return periods of 20, 50, and 100 years, as well as conclusions and recommendations for water elevation at the construction site.

The main services performed for this project were:

- Hydrological survey, drainage and flooding hazard assessment;
- Topographical survey services for design and land acquisition;
- Preliminary geotechnical investigation.

Photo credits: ©ICE





Project Name: Drainage, Flooding and Land Acquisition Services for the 140MW Photovoltaic Plant in Karavasta

End date: 08/2021

Client: Voltalia Albania sh.p.k.

Location: Divjakë, Albania

Description: Karavasta PV Power Plant has an installed capacity 140 MWp. It is located in Fier region Albania with a study area of about 200 ha. The aim is to develop a preliminary hydraulic model for the watershed area where the "Karavasta" 140 MW photovoltaic plant will be constructed. The main objective of this project is to provide a description of the area, climate, watershed characteristics, and flood maps for return periods of 20, 50, and 100 years, as well as conclusions and recommendations for water elevation at the construction site.

The main services performed for this project were:

- Hydrological survey and flooding hazard assessment;
- Topographical survey services for land acquisition;

Photo credits: ©ICE

Project Name: Local services for the design of floating 12MW photovoltaic panels in Vau i Dejës

End date: 12/2020

Client: Tractebel

Location: Vau i Dejës, Albania

Description: The Vau i Dejes Floating PV Power Plant has an installed capacity of 12 MWp and is located in the Lake of Vau i Dejes in the Shkodra region. Illyrian Consulting Engineers shpk company has supported TRACTABEL in designing photovoltaic floating panels for Vau Dejes.

The primary services provided within this project were as follows:

- Review of the design project
- Grid Connection Assessment
- Review of the aspects of the project related to local regulations, permits, and environmental check
- Assessment of foundation work, excavations, and soil conditions
- Permitting, Environmental Services

Photo credits: ©ICE

Project Name: Feasibility study for Rooftop mounted PV system and EE bulb replacement

End date: 10/2021

Client: GIZ GmbH

Location: Elbasan, Albania

Description: The project consist in evaluation of solar energy yields in 7 municipalities, develoopement of the feasibility study for two municipality buildings Elbasan and Shijak.

The main services provided within this Project were:

- Project layout and details;
- Estimation of energy production and energy yields;
- Grid connection;
- BoQ and Cost estimation;
- Technical Specifications and
- Financial analysis;

Photo credits: ©ICE